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## Letters from Chas. Dadant.

ON BOARD OF LA VILLE DE PARIS,  
July 21, 1872.

MY DEAR FRIENDS:—The first days of our journey have been extremely agreeable, for the sea was very calm. We left New York on the 13th, at 11 o'clock, A. M. Our vessel was the fourth steamer that started from New York on the same day. Two of these steamers, being only a few miles ahead of us, were soon outsailed, but a boat (belonging to the new Liverpool Steamship Company), the White Star, did not seem disposed to allow us to beat her. This boat had crossed the ocean in the fastest time on record, seven days and fourteen hours. She was consequently taking pride in keeping ahead of us. The next morning she still was ahead, almost out of sight. At noon we were by her side gaining ground. In the evening she was far behind and disappeared during the night. We will be in Brest to-morrow, and at Havre on Tuesday, after ten days sea travel.

I suffered but little, although we had two days of very rough weather; but these two days I spent in bed, and I could hear from my cabin during the meals, the rattle of broken glass, plates and bottles. My hive trunk was an object of general curiosity. Many questions were asked, and I had to recite volumes of bee-culture, which seemed to interest my hearers greatly, although many of them had never heard a word about bees. A brother-in-law of the editor of *L'Esperance de Nancy*, made me promise to send him articles on beekeeping for the paper. On the whole I am in good health, but greatly tired of sea life. What would it be, if instead of ten days we were to remain fifty days on the sea, as of old? I see around me many people who seem to amuse themselves greatly, but how I differ from them! Family life is so sweet when compared to all that noise, that one feels most the value of it when it is wanting.

PARIS, July 25.

I am in Paris. I did not write from Havre, because I had no time. We arrived in this city on the 23d, ten days after our departure from

New York. You will easily imagine the emotion that took possession of me when I again viewed my native country after such a long absence. As soon as we arrived in sight of the French shores, a young Frenchman began to sing the hymn: *Vers les rives de France*. (Towards the shores of France.) He first sang alone, then a little group was formed, and soon all the passengers were gathered, singing this beautiful song. When singing the last chorus: *Voila, Voila, la France \* \* \* rivage béni*. (There, there is France. \* \* \* blessed shore.) She is really beautiful, our beautiful France; so beautiful, that it takes a big effort to leave her, and that one cannot see her again, without an immense thrill of pleasure; so beautiful that all like to see her and to inhabit her shores. They say that the French are light minded. It is true, but they are gay, and that is something, for gayety is extremely attractive. In the train from Havre to Paris, I found myself in company with two middle-aged French ladies and a young English lady, accompanied by her husband. The two French ladies were gay and as playful, and kept up the interest by their remarks. But the English lady kept as cool and as quiet as a Roman matron of the old ages. Being French by birth, I am probably a partial judge, but I prefer the French character to the English.

Happily our American ladies have not inherited the English character altogether. I find one fault, however, with them; that is, the size of their chignons.

Here in Paris, I can find none of the kilogrammes of rags with which some American ladies overload their heads. Nor do I see any of the pyramidal hats that are the pride of the most eccentric. They are out of fashion in Paris, and I hope they always will be.

Having landed in Havre very late on Tuesday, I started from that city the next day, in the morning. Before my departure, I went to see the boat agent to ascertain the cost of transportation of bees.

I arrived in Paris yesterday evening at six o'clock. I have been out on business since daylight, and I am going to take my breakfast with M. J. Pelletau, the editor of *La Culture*.

I will write more at length from Italy.

CH. DADANT.

[For the American Bee Journal.]  
**Novice.**

Please, Mr. Editor, can't we have a hive too? We know you will think, and many of our "large family" say, there are too many already and that the more we get, the worse we are off, and that there are patent hives enough for the next thousand years, etc.

But, Mr. Editor, "*our hive*" is "nothing new," and, of course, is not patentable, we hope so, at least, and the novelty, if it is that, it is entirely stripped of the thousand and one valuable, all important features that worry the patient beekeeper and waste his valuable time.

Now, then, our hive is simply a square box open top and bottom.

As we are speaking to a generation possessing brains and using them, we will give our reasons as we go along. For instance, we *must* have a movable bottom, that the lower story may be used as an upper one, and vice versa. We dispense with a portico, also, for the same reason, and because it takes lumber, makes the hive heavy, harbors spiders, and gives no real advantage that we know of.

The stand for the hive and bottom board are one and the same thing, for when a hive with a bottom board stands on another board, we have the space between them wet and damp much longer after rains than when a single board makes both, and for this reason we advise all hives having permanent bottoms, to have for a stand, simply a frame of four pieces of inch board, two inches wide, and made one-half inch smaller each way than the bottom of the hive; thus allowing the rain to run down without being carried under the hive.

The bottom and cover are one and the same thing, and can be used in either capacity, so that if you have a stock of one you have both, and there ends our hive, when we have told you how to make the all important top or bottom.

Suppose you make a frame just like the hive, only two inches in depth instead of full depth, and when this frame is strongly made by halving in the corner, halve in for cover a sound board, but leave no projection at all, and nail it firmly from both ways, so that warping and opening is impossible.

When used for a cover, both hive and cover are beveled, so that the crack or joint carries the water outward, and when used for a bottom board the cover is also beveled around the outside edge, that the hive may fit over it for the same reason.

Accordingly, any number of hives may be piled on each other, or any number of bottoms or covers or all together, and all fit and no projections. They can be packed closely in winter quarters, or in a wagon or in shelter, empty, and if they are to be handled we can walk off briskly with a hive under each arm.

But the bottoms will drop off and the covers get away!

No they don't, when we have had our say, for you are to get some pieces of galvanized iron-wire, as large as a knitting needle, and three inches long; bend each end at right angles one-

half inch, and when the bottom is squarely in place drive these staples with one foot in the bottom and one in the hive. And now for the entrance, which cannot be of blocks, nor do we want them, for they are loose and get lost, and yet, we want an entrance that can be enlarged and contracted. Nothing loose, that can be lost; nothing expensive; nothing that will get gummed and stick fast, was a problem we long sought to solve, but do it now very simply, thus:

Whittle out the lower inside corner of the front end board on a curve deepest in the middle, but not deep enough to remove any of the outside corner, or we should spoil it if ever used for an upper story.

Now, if you slide the hive forward so as to project over the bottom, we have an entrance, first small in the middle, and then enlarging to any extent, if we move it far enough, or so far as our staples will let it slide; and when we close a hive it is closed *surely*, and we need have no fear that robbers may crowd it open as they do sometimes the blocks. Use the door step or alighting board described last month.

The cover may be hinged on one side, and if you make a cloth quilt to cover the frame so closely that no bee can get by it, you can close a hive full of bees as quickly as a carpenter closes his tool chest. As a visitor remarked when we opened one of these hives, showed him two queens peaceably presiding therein, and then put them both back and closed the hive before he or they had time to be frightened.

The quilt, if properly made, can be spread over angry bees, and they will hush like a brood of chickens, as such closing up does not hurt them at all, and those remaining outside quickly seek the entrance when brushed away. A cover that is hinged can be opened and closed with one hand, and if in a hurry, we frequently remove a frame with the other. Taking off a cover with both hands and stooping to lay it down is tiresome, more especially if it projects over the hive two or three inches.

When one hive requires more room we simply place as many frames as we wish in another hive with no cover or bottom, and raise the original to allow this to set under it, or if we want a hive spread horizontally, place two tight together—nothing hinders—and cut passages when or as large as you like between them, and you then have every advantage, except a double division board, and this may be better if one is good. The entrance can easily be made on one of the long sides if preferred.

No water gets into this hive, as the top is one solid board, and no rain drives in the entrance, as it is directly upward.

The hive as well as covers, should be all halved together, as they have no permanent bottom to give them strength.

The halving or rabbetting is all done on the end pieces, viz.: across the top for the frame to rest on, and same depth down each end. The rabbet that holds the frames should be low enough to allow about three-quarters of an inch for the quilt to drop in, to close when laid on top of frames. Rabbet in ends of end piece deep

enough to let side pieces in flush. Thus you will see the side pieces of hive are just as long as extreme length of your frame, adding a little for end shake.

Grain of the lumber should always run horizontally, to save trouble from shrinking of lumber, and for this reason allow considerable room below frames over bottom board.

A hive made thus should be always kept well painted. We use the Averill chemical paint, and it is just fun to paint them when piled up in square pillars.

In June, July and August, we think they should be shaded, but the rest of the year the first chance the sun has at them (no projections), we think a positive advantage, and that they cannot have too much.

About 10 feet of lumber only is required for such a hive, single story, and the whole cost should not exceed \$1.00, without frames. A very good way to secure a perfect fit of cover and bottom is to first get simple complete box, with top and bottom, made of one solid board, halved in as are also the corners. This box for a Langstroth hive should be inside  $18\frac{1}{4} \times 14\frac{1}{4}$ , and depth about  $15\frac{1}{4}$  inches. Saw off  $2\frac{1}{2}$  inches of the top clear around, dropping the handle of the saw so as to get the bevel to shed rain, and then hinging the same slice, so that it opens just like the cover of a trunk.

Saw off the bottom in the same way, and you have, after turning it over, a complete bottom board and stand. Now, the hive itself is complete, except the rabbet to hold the frames, and if you have only one partially railed this part, you can take it apart to cut the rabbet, after which the nails can be replaced in their holes, and the whole nailed securely from both ways, for we must have the hive so that when lifted alone there will be no danger of springing out of shape.

Now, we hereby challenge the beekeepers of the world to tell us what can be accomplished with their patent hives that cannot be done with this, simple and unpretending as it is. The expense is not over one-half that of hives generally used, and the labor of handling in the apiary, it seems to us, less than one-half. If you wish to raise queens, saw a place in the ends and bottom to slide in a sheet of tin, and you can use ten frames as before, and queens raised in one-half.

We bore a one-half inch hole in the end opposite the entrance, and cover with the same quilt, which permits either side to be turned up without disturbing the other. By using three end division boards, we have raised a large number of queens with more satisfaction than we ever did before. When a queen is removed and no more wanted, slide out your sheet of tin and all is well. In many cases the workers have passed freely over the division boards or tins, with no quarrelling, and no injury to the queens, even when four were kept in the hive.

In this case an entrance is made in each of the four sides, and two frames used in each apartment, which allows easy removal for inspection, and the queens can be kept until their brood hatches in these nuclei.

Now, brother beekeeper, what is to hinder wintering two queens in such a hive? We shall try several, and we need not enumerate the advantages of extra queens at any season. Suppose we had two weak colonies in the spring, could we not unite them in this way without killing either queen, and then using one of them at the proper time elsewhere?

I presume no one will say that we might thus get too much brood in a hive, say in April or May for instance.

We are indebted to Mr. C. C. Miller, Marengo, Ills., for the plan of dividing a hive, see page 88, vol. vi. He uses six apartments, one frame each, and, we think, stationary divisions, but we think, we prefer only four, and two combs each. Many thanks, Mr. Miller.

Who has wintered two queens in a hive, and is there any difficulty? We cannot think there is any difficulty.

Those who are inclined to doubt that coffee sugar syrup, properly sealed up in frames of comb, is not a sure remedy for the bee-cholera, would do well to read carefully the large amount of matter on that subject in the back numbers, although no one seems to have thought, before we mentioned it, that as bad food was the only trouble, chemicals from food or sugar would be an infallible remedy.

We cannot give here the host of facts that we have received on the subject, but will say that it seems that not more than four or five pounds of sealed syrup are necessary to keep a proper sized colony during the time they are necessarily in doors, or about four months. We think, but cannot be positive until further experiments, that one quart of young bees is better than more to go into winter quarters, and that one pound of food per month will be the average quantity needed. This sealed sugar syrup to be given in clear empty combs when they are put into winter quarters. But, please, do not run any risk of the little chaps starving. If you give them four times what they require, it will not come amiss in spring when they are raising brood. We shall let them use their natural stores until we put them in doors, about November 1st to 15th, according to weather, and then save the balance until they are out again in spring. In regard to pollen, we think, we shall try and give some to each colony, unless it be a few, for experiment, without any at all.

Please report facts all you can, or theories supported by facts, and we shall soon have as little fear of dysentery as we now do of moth millers.

Well, as we have now seventy-one colonies, it is going to be quite a task to prepare so many combs of sealed syrup, so listen a minute:

Our tea-kettle feeders will give a colony twenty-five pounds in ten hours, or less; but two difficulties then are here. To get a colony secreting wax, they will have to consume about five of the twenty five pounds, besides the labor and stickiness of carrying around and making so much syrup.

Our bees are very willing to help whenever they can, as we saw illustrated a few days ago, when some empty sugar barrels were left out



during a light shower; in fact they quite *cheerfully* (maybe a little *vehemently* mixed with it) undertook the pleasant task of taking the saccharine contents of a whole grocery store to their hives, about an eighth of a mile.

Now, we reasoned thus: May not so much energy be a fine thing when properly directed? and, presto! one of our hives, minus cover, was treated with beeswax a la barrels, and a float of strips of pine extemporized; two-and-a-half gallons boiling water poured on fifty pounds coffee sugar, and ten teaspoonfuls cream tartar stirred thoroughly, and then when cold, poured into the waxed hive, which was placed underneath a two-story strong colony, and our part was ended; the seventy pounds of syrup was speedily in the twenty combs, and they are now sealing it up. The colony was allowed to fly as usual, and as no bottom board intervened, they had full scope for their powers. As they are now wax-workers, will not a small amount of syrup keep them so, and cannot more than twenty out of twenty-five pounds of syrup be obtained in the comb?

And if a tight, zinc-lined box, capable of holding three barrels of sugar were given them, would they not use it all before stopping, if empty combs were given them? This we are going to try. We feel quite sure that no boiling is necessary, and that a barrel or some larger vessel may be used, by simply pouring boiling water on the sugar, as before mentioned.

We think one thousand pounds of syrup may be prepared in this way in an hour, and that by simply giving the bee access to it in the manner described, no further labor will be necessary than removing the filled frames, and giving the bees empty ones.

This experiment will give us ample time to experiment more fully with artificial store combs, of which, more anon.

And now, Mr. Editor, we are not half done, if we answer all the queries we have been asked through the Bee Journal. We have also received so many letters saying that our articles would be acceptable still longer, that we must offer them as an excuse. If any one would like us to give more room for others, please be frank, and tell us so.

Mr. Fisher, of Nashville, wishes to know "how soon we expect honey from our basswood orchard." Some in five years; perhaps enough to make it an object in ten years; but we have faith, and trust in Providence for the rest.

"Will not some beekeeper think it a nice neighborhood to locate, also?" A point we well considered at the start. But as we shall increase our bees as forage increases, we shall endeavor to make them think the locality overstocked, even if we have to keep one thousand colonies to hold our own.

May we, by the way, ask Mr. Jasper Hazen one question? In those localities near him that were overstocked some seasons, did those bees die of starvation that had made so many hundred pounds box honey in a season? If so, they certainly did not starve *themselves*; their *greedy owners* starved them.

On the other hand, if they died of starvation, without furnishing any surplus honey at all,

there seems to be a disagreeable feature of his hive and pile of boxes, that he has not mentioned in his report of astonishing yields of box honey.

Will Mr. Hazen tell us more about these colonies dying of starvation because the locality was overstocked.

We never knew a colony to fail getting an ample supply to winter over, when they had room and empty combs.

Mr. C. C. Miller, Marengo, Illinois, writes as follows:

#### A Word with Novice.

Before it comes time, Mr. Novice, will you give us again explicit directions about feeding bees with sugar syrup? How prepared? How much to a hive? When to feed, &c.? I used last year, old tin fruit cans, punching holes through the lids, and inverting them. Do you think tea-kettles would be any better?

How many bees had you, spring of 1871? how much honey did you take, and how much increase did you have? Same for 1872. If you had watched closely, I think you would have found that your queen worker, mentioned in the June and July numbers, was suffocated by her own bees. I have known that to be the case with poor queens after laying a very few eggs.

I cannot answer your question, how to keep young queens in their cells, but can give you a plan that I found less trouble than the device you used. I took a couple of top bars of frames for the sides of a box without top or bottom, said box being, of course, the length of the frame, and two or three inches wide, and about an inch high, separated into apartments about two inches square. Then for a bottom, I tacked on a piece of wire cloth the entire length, and made a cover for the top of each apartment of square blocks; glass covers would be better. This I placed on my nucleus hive, or perhaps it would do on any hive, but I think not so well on a hive containing a queen. Then within two or three days of their hatching out, I cut out queen cells and put one in each apartment, and as the heat ascended through the wire cloth, they hatched out just as well as if they had not been cut out, and could be kept there a few days, I think, but I am not sure that I allowed any to remain more than a day or two after hatching. By the way, I wish you would try one of my kind of nucleus hives. You would find it very convenient to have a few queens always in laying order, for any emergency, and then when you get through needing any more queens, just slip out the six frames, and put in one hive, and you have a nice little swarm. You can have a patent right for half-price, to be paid for in honey, to be eaten at your house, if ever I come there.

C. C. MILLER.

Marengo, Ill.

To which we answer briefly: If you allow their natural stores to remain in the hive, and they get the dysentery, they will consume, or partially consume twenty-five pounds or more, and perhaps die then. Those colonies that ourselves and others gave sugar syrup alone, seemed about as heavy when taken out in spring as when put in. Get the syrup sealed up in warm weather. We should have it all done in September. The tea-kettle feeder is no better in any respect, only that it is larger, and so requires less time to re-fill.

Sixty-four colonies in spring of 1871, or near



that. No increase to mention. Sold about three thousand five hundred pounds honey.

Spring of 1872, lost three and sold three. Have now seventy-one, so that we have increased about thirteen, and taken about thirty five hundred pounds of honey as last year, and they have nearly enough now to winter, if permitted to have their natural stores.

We afterwards found our queen worker in the hive; she destroyed the cell we introduced, but had long ceased laying, and so we were obliged to "skeese" her after all, which we shall do in future with such, "earlier in life."

The queen we mentioned sometime ago as laying so few eggs during the three years we kept her, and that she had been replaced by what Mr. Price would call a natural queen cell, we promised to report. Well, her royal descendant was just about as good as her mother, and no better, so there is one experiment to show that qualities are inherited.

Mr. Thomas Pierson, Ghent, Ohio asks, "at what time do you reduce from two to one-story hive? Do you give all the brood to the bees? Where do you keep your combs? and do you smoke them with brimstone? If honey in the combs, do you extract it? How about preserving them, or keeping them from ants, if honey is not extracted?"

We answer all by saying, that we leave combs above until about November 1st, and then remove them, taking as much drone comb as we can, and have no trouble in getting all brood in below. We put the combs and honey, if there be but little, into hives, shutting them up close, and have no trouble in keeping them safe until May, without further attention. Our new hive is admirable for this, as it is perfectly tight, and can be piled up in a solid shape, taking but little room when the covers and bottoms are all left off, except one on top and bottom of the whole pile.

As we like to mention everything new in bee-culture that is good, we must say that Gray & Winder's queen cages have given us much satisfaction. We also find their wax extractor very convenient.

In our last, we perhaps made rather too hard a criticism on Adair's Progressive Bee-culture, and think it due him to say, there is much that is good in it; yet we should call it *Un-progressive* Bee-culture, on the whole, and it is so much an advertisement for a patent hive, that it seems it should be furnished gratuitously, as should all books, in our opinion, that are written in the interest of any patented article. Are we queer or peculiar in our ideas? Mr. Adair's articles on Transactions of N. A. Beekeepers' Society, we think much more valuable than Progressive Bee-culture.

Mr. Adair has given us many things that are valuable, and we hope to hear from him often.

We suppose it is well understood, that the simple hive we have described, is as much a Langstroth hive as the usual form, and that it cannot be used by those possessing no right, without infringement.

Mr. L. cautioned us some time ago about recommending such a brief form of a hive until

we had more fully tested them. And we can only add, as we said elsewhere, that after using over a dozen this summer, in every contingency, we challenge the beekeepers of the world to tell us what necessary operation in bee-culture, the simple hive just described does not admit of.

Some one asks about knives. We prefer a very thin, sharp blade, and never use hot water. The point is first slid under the caps, and they are then sliced from the under side, so as to leave the cap in an entire sheet, in its original place, until it comes off all at once. If the knife is *very* thin and sharp, the sheet of caps does not stick to it at all.

Mr. Quinby has recently sent us a knife with a curved point, for uneven combs, but we should prefer to use the straight blade, and slice down the crooked combs until the caps were built nearly level.

Of course, we have the blade bent at the handle, but so thin that a little pressure springs it straight whenever we wish to reach down into a hive to loosen attachments, etc.

To the many kind friends who have written us, that we are unable to answer other than here, we tender our sincere and kindest thanks. We have endeavored to make this article answer as many of your questions as possible, and we would suggest that many, very many of our correspondents could write if they would, much for the Journal that would be of both value and interest. We know our editor would be pleased to hear from you all, and it *may be*, that after this, he will be pleased to hear a little less from your old friend

NOVICE.

[Translated from the Bienenzeitung.]

### The Theory of Wintering.

It is well known that each living organism, if it will exist in a healthy condition, must live in a known temperature. The narrower these limits are drawn, the less developed and self-sustaining will be the life of the organism, or in other words, the smaller will be the centre of the nervous system.

While man, whose nervous system stands highest in development, and who has the most fully developed brain of all the creatures of the earth, is not only able to live in all degrees of latitude, but also able to endure a variation of temperature of 105° R.; while most insects being brainless, and especially bees, can hardly endure a variation of 40° R., as they die from cold at 6° R., and from heat at 46° R.

Thus the first winter that would pass over our Temperate Zone would destroy almost all the insects, had not providence provided for their preservation. There are four methods of preservation: 1st. In the egg; 2d. In the larva, to which belong all those insects requiring two or more years for their development; 3d. In the chrysalis; 4th. The developed insect. The most of those belonging to this latter class pass the winter in a state of torpidity.

To this latter class belong the bees, and it is well known that these, in order that their de-

pressed vitality may not be wholly extinguished, require for their successful wintering, besides the necessary food and rest, especially a protected dwelling. The successful wintering of his bees is a masterwork of the beekeeper, as through ignorance of an inviolable, universal and authentic law, he will be very liable to commit many mistakes.

Let us see whether from the known discoveries and practical advancements to a successful wintering of the bees, a universal law cannot be developed.

In our climate bees need for successful wintering: 1. A properly constructed hive; 2. Healthy and sufficient food in its proper place; 3. Strong stock; 4. An undisturbed rest. The last three conditions are admitted on all hands. Every one knows that they are unalterable and what is necessary to fulfil them. What is a proper winter dwelling, is alone a subject of thought and dispute. With this we have alone to do.

A proper winter dwelling for bees needs two requisites; that it be neither too cold nor too warm. It is too cold: 1st. When the hive is too large for the quantity of bees to be wintered in it, the animal heat developed from the bees being diffused over too large a space; 2d. When the hive contains cracks or openings, so that the outside cold air would have free passage through the hive. By actual experiment, it has been found that bees become torpid when placed for any length of time in an atmosphere of 6° R.; that even continuous 8° R. will be injurious; hence when in winter quarters, and without brood, if they are to be kept successfully, they must be in a temperature of 10° R. This temperature is found in every properly wintered stock, by actual observations with the thermometer, of course, not in the immediate vicinity of the brood, nor in unoccupied space of the hive, but on the outer circle of the cluster of bees. Is the hive from any of the above-mentioned reasons too cold, each descending degree of temperature will render the revival of the bees from their torpidity more difficult. The stock will eventually die. A swarm is able to exist in a temperature of 28° R., unless it is much disturbed or has a large quantity of brood.

A swarm, therefore, in order to be destroyed, must be awakened fully—a condition which would not nominally happen in winter. All the heat of the hive is developed from the bees themselves. The development of heat is labor, and a kind of labor which largely consumes vigor of the bees, especially when owing to the defective construction of the hive, the heat, through radiation, is lost. Therefore, a stock can for a short period endure intense cold, but is frozen by a relative low temperature, in which it is placed for weeks or months. It dies from exhaustion. In more favorable circumstances, when the hive is in a position to protect itself from the cold, it may suffer from an attack of dysentery. To produce warmth, the bees must consume a great quantity of heat producing material, *i. e.*, honey, whereby the intestines are so filled that they are no longer able to contain the feces. The hive should, therefore, be so constructed that the bees, during their period of

torpidity and when without brood, are able to obtain and sustain a warmth of 10° R. Should the hive not be able to afford the desired protection, it must be removed to a dark protected place, or protected from the cold by wrappings of some material. For such purposes a covering made of straw or wood affords the best protection. Through the inordinate covering with straw, the advantage may be overdone.

The hive dare not be too warm. Hives that are too warm are as injurious for wintering bees in, as when too cold. They are the product of the last twenty years, and their destructiveness is as yet not fully known. So long as logs, straw hives and single Dzierzon\* hives were used, this charge was unknown. It was only when beekeepers began to keep bees in a cupboard—like hives, and in pavillions, and for the better retention of warmth, closely wrapping these and single hives with covering, that this trouble made its appearance.

We have no desire to do Baron von Berlepsch wrong, when we attribute to him the origin and dissemination of these too warm dwellings. He invented the pavillion, in which each single hive, where it comes in contact with the outside air, is well protected; he first taught the building of double walls; he narrowed the space occupied by the bees to the smallest possible space, by removing the outside frames, and sub-

\* The hives alluded to in this article are the Dzierzon and Berlepsch hives, and as many of our readers may have some difficulty in understanding the various allusions, we append herewith a description of the two hives, taken from the *BEE JOURNAL*, Vol. 1, pp. 14, 15: "The Dzierzon hive, in its original form, was a simple oblong box, thirty inches long, nine inches broad, and fifteen inches high, the ends being movable, buttoned doors. Two corresponding grooves were cut in the inner sides, half an inch from the top, on which were placed, at intervals of a half inch apart, a series of cross bars or slats fitted up with empty pieces of comb as guides for the bees. The entrance was on one of the sides, midway of its length, and one inch from the bottom. In building or extending the combs the bees attach them to the sides of the hive. These attachments have to be severed when the bars and combs are to be taken out. As the ends of the bars are confined by, and can only slide in, the grooves, the combs must be taken out consecutively, and an interior comb can be reached only by removing all the anterior ones. With his hives substantially thus constructed, though with various modifications, that celebrated apiarist made all his observations.

By a more recent modification or the introduction of what he calls *double* or *twin* hives, effects a saving of material, facilitates the multiplication of colonies, and secures his bees greater protection against the severity of the winter.

One of the defects of the Dzierzon hive—the impossibility of removing the combs without severing the side attachment—was so obvious, that a remedy was early sought, and in 1855, the Baron of Berlepsch adopted frames similar in principle, though slightly differing in construction from those of the Langstroth hive. These enabled him to remove the combs without cutting and with ease. But his frames are troublesome to make and costly besides—two objections which operate against their introduction into use."

stituting therefor straw mats; he sealed hermetically every crack, and stopped every opening for the escape of heat, and then imagines he has the bees in their native tropical climate, seated in Abraham's bosom. But they are sitting in hell, and are suffering torment like the rich man. Every one who has wintered his bees in too warm hives, has found this to his own satisfaction, long before they discovered the true cause of the wholesale slaughter of their bees. So soon as the temperature outside the hive sinks to below 8° R., and the bees are prevented from leaving the hive, they must remain in the hive, and fall into the known winter torpor. The opposite condition is, when existing for any length of time, contrary to nature. Their activity ceases at 10° R.; at 12° R. their full activity develops itself, and it is with the greatest difficulty that they are kept within the hives.

Is their dwelling too warm, either being built as regards the bees, too narrow, or the walls of the hive are too thick, so preventing as well the escape of the warmth within the hive as the introduction of fresh air from the outside, and thus also preventing the torpor of the bees, and a heat of a higher temperature than 10° R. will be produced.

Should this state continue for any length of time, the bees will become unquiet. I refer to the temperature of the outer periphery of the winter cluster, and to the brood which can readily endure a heat of 28° R. without injury, because as brood there is no necessity for their flying out. A large number of the bees will leave their place in the winter cluster, and crawl to the entrance of the hive in the hope of enjoying an airing. The low temperature outside forbids this. The bees return again and become more and more restless. At last they become so heated by the constantly increasing temperature of the interior, that they begin to buzz and fan. I have found stocks in such condition, that when I opened the outer door, the bees were seen running wildly over the inner glass door, which was warm to the touch.

That like circumstances occur, no one will deny, since there has been much complaint in regard to it; only it is not clearly known, or perhaps not known at all, that too much heat is the cause of all this. Yet one can readily convince himself. Take a strong, entirely healthy swarm, wintering in a normal condition, and place it in a light chamber of 6° R. temperature, and in a few days the same condition will be discovered, as exists for weeks and months in an over heated hive.

Does this too great heat continue for any length of time, it naturally produces great thirst, since in the heated dwelling with their thick walls, the precipitation of moisture is either wholly prevented, or first appears on the sides and at the entrance, from which the water may be seen flowing. It is a certain sign that not Dzierzon, from whom nothing relative to bee-culture readily escapes, but Berlepsch, the master builder of too warm dwellings, has awakened the desire of thirst. From many and various experiments and discoveries, I have

discovered that a too warm dwelling develops thirst.

This is not a real disease of the bees, only a symptom of sickness—of the overheating of the bees and analogous to the thirst developed by fever.\*

This desire for thirst must be allayed in time by suitable drinks, or the last stage will soon be reached, and here dysentery will bring the bees to the borders of destruction. It is best not to let the bees reach this state of thirst before using preventives; the hive should be cooled at the proper time, either by opening the door or through the introduction of fresh air through the Molitor, Muhlfeld plan, by placing icicles in the entrance or something of that manner; but the best plan for wintering naturally is, from the beginning, to prevent overheating. If the beekeeper has very warm hives, which he does not desire to dispense with, let him, above all things, forbear filling up the honey room with any badly conducting material; the placing of straw mats inside of the door, the narrowing of the entrance, etc. In pavilions, during warm winter days as well as nights, let the door of the pavilion open.

From these thus developed theories a general law may be made for the successful wintering of bees. *Bees should be so wintered that around the periphery of the winter cluster a temperature of 10° R. could be easily maintained.*

Owing to the great difference in hives, and the changes in the outer temperature, experience alone will teach how advantageously to follow the rule. Those will winter their bees with the greatest safety who are in the position to bury their bees, because in the earth there will be an equal temperature maintained as well in cold as in warm weather; and even when warm weather appears, the darkness which surrounds the bees will prevent them from becoming restless.

SCHONFELD.

Teutschel, Dec. 8, 1871.

#### Remarks on the above Article by Dzierzon.

Herr Schonfeld develops in No. 1 of the *Bienenzeitung*, excellent theoretical principles relative to wintering bees, nevertheless, I cannot entirely consent to its practical application, namely, when he says that bee hives should not be made too warm.

I find that portion contradicted by his own words, that the bees require a certain temperature which upon the surface of the cluster dare not sink below 10° R.; that the warmth of the hive is developed from the bees; that with the greatest cold they are able to develop the required heat; that they can by degrees destroy themselves, should they make too great exertions and have to continue them for too long a

\*Notwithstanding it is especially useful to provide drink, especially in cold hives, towards the end of winter, which appears from my drinking glasses, which the bees not in any wise disturb until the brood demands water, and the bees are thus prevented from an injurious flight in search of water.



time. According to these principles, that hive is best, which as far as possible prevents the escape of heat. Any one would just as soon complain of a room being too comfortable, as to complain of a bee hive being too warm, or more properly, retaining too much heat; in that the sides themselves develop no heat, but only retain that arising from the bees and preventing it from being lost by radiation. The bees will never develop more heat than is needed, and if, owing to the casual stopping of the entrance, or some other disturbance, the bees should raise the temperature of the hive to the highest degree, they will drive out the surplus heat by ventilation, and in a short time resume their natural quiet.

A bee hive may be too contracted for a very large swarm when it is too small in itself or contains too much honey. Since one is not able to foresee the amount of room that will be occupied by honey and combs, it may readily happen that the need of necessary air—that indispensable element of life—will appear, and unrest and its consequent evils, especially dysentery, will be brought on. The discussion can clearly not be concerning the too great and injurious heat retaining qualities of the bee hive. In the thickest and warmest logs, according to actual observation, bees winter best. Such hives are dangerous in the summer rather than in the winter. While, especially if they are rounded or four sided, will the temperature be equal throughout the hive, and hence the brood be spread throughout the hive in all directions, and especially drone brood in large quantities, so that the possessor of these stocks will, in autumn, have to be satisfied with many empty combs, unless the honey harvest be unusually favorable, whereas in spring they promised most profit from rational management, viz.: the confinement of the brood space, especially drone brood, the arrangement of a particular honey space or magazine, and the transfer of a large portion of the population of the hive by means of artificial swarming, &c.

One can readily see how advantageous the bees may be wintered when the walls of their hive, not only do not obstruct heat, but rather bring in heat; thus in hives containing several swarms they gladly place their winter quarter against the common partition, and in hives containing three swarms, a very weak swarm will winter exceedingly well in the centre division.

At all events, such bee hives are very dry, and the bees must not be left without water, especially if they have candied honey or pure candy for their winter food. With ordinary fluid honey they will remain perfectly quiet until the commencement of brood rearing. A little thirst will work no injury, but, on the contrary, it has the advantage to prevent the bees from beginning the rearing of brood too early. That bees should so suffer from thirst, that they will drink eagerly every drop of water, bustle about and make a noise, has never been an observation of mine; they conduct themselves more like bees suffering from hunger. Individual ones may fly out, or crawl around the hive like ants, seeking to drink any water they may find, but the great

mass of the bees will remain in perfect quiet. The warmer the hive is the less will the bees be affected by any change of temperature, and therefore it will keep the bees in the greatest degree of rest.

How Herr Schonfeld can maintain the direct opposite as the consequences of the warmth-retaining qualities of the hive, and can declare that the bees will become restless when too warm, I am unable to comprehend. Let the temperature within the hive, and outside be what it will, and vary from 20° to 30° R., the bees will show signs of wakefulness and remain quiet, should they have nothing outside to fetch. This is seen late in summer and in autumn, and is also seen in the tropics during the hot summers, which answer to our winters. Sometimes the bees make a start for purification, but soon return and resume their normal state; in the hive they naturally do not gather themselves in a cluster, but spread themselves over the combs. Their rest and idleness is, however, the same as that which we see in our bees in autumn and winter. Individual bees will, of course, be seen flying about as scouts, and only when they bring the intelligence that there is something to be made, will the majority take to the wing.

I can attribute this disturbance of the bees, not as Herr Schonfeld, to the overheated condition of the hive, but to a lack of air, or confinement, though it might be the consequence of queenless or some accidental disturbance from the outside. In a tightly and well built hive, with perhaps double doors, especially when placed in a close room, may the bees suffer from a want of air. The carbonic acid gas, being heavier than air, gradually flows off; but as the much heavier water will not flow readily from the spigot when the bughole is hermetically sealed, so in the bee hive, the oxygen may be so consumed, that the carbonic acid gas will rise, and the bees become very uneasy and anxious. Besides, when the entrance is closed by perforated bar, the population of the hive may soon be in the greatest agitation. The bees buzz around and bite the door, without one showing itself at the entrance. The bees appear to have conducted themselves thus on the occasion described by Herr Schonfeld. When the bees rush against the glass door, they desire to get out into the open air, and should they not appear at the entrance, the reason is that it is inaccessible. If the bees are not to destroy themselves, through anxious and fruitless efforts to escape from the hive, help must be extended to them without loss of time. In favorable weather the entrance to the hive should be opened, and if possible, be opened early, so that the entrance may be readily seen. In cold weather the bees may be brought in a warm room. If neither the one nor the other is possible, then the openings around the entrance through which the bees may escape, are tightly closed, and a more favorable season awaited for performing further operations. The chief aim of the operation is that the bees be so moved that they are placed near the entrance of the hive. It is of no use to attempt to drive them away with smoke alone, they will return to pro-

tect the combs now containing, or which have heretofore contained, brood.

The combs upon which the bees cluster should be removed in the hive to a position near the entrance; and should the combs be rather broad, that end on which the bees cluster thickest should be placed towards the entrance. Should the edges of the combs be somewhat distant from the walls of the hive, it would be well to put a small strip of comb between the comb and the wall of the hive, so as to form a bridge between the entrance and the comb, thereby giving a ready means of access to the comb. Many stocks have neglected a favorable time for the purification flight, and lost many bees, which, half benumbed, are able to reach the entrance of the hive, and die in the hive, the way to the entrance being long and much obstructed. I think it doubtful therefore whether it is judicious in box hives to put the entrance at the bottom of the hive. When the boxes are high, two entrances are advantageous; the one at the bottom and the other about half the height of the brood. And these entrances can be closed, or partly closed, according as may be required by the strength of the swarm and the position of the bees in winter and when rearing brood. To leave the openings both open in winter will be beneficial to strong stocks. The air can thus pass in at one entrance and out at the other, and will thus be constantly renewed without any aid from the bees, so that strong stocks, which carefully guard the entrance, will pass safely through the winter. How quickly, especially with weak stocks, a want of air will show itself, I discovered through actual experiment in this manner. I wintered for the purpose of having reserve queens, and also for the purpose of making observations, small swarms in small boxes, and sometimes transferred strong swarms after they had suffered from cold, in like boxes, and placed them in a room. To protect them from the light, I placed some in a clothes closet and some in larger boxes. Whenever I opened them the bees began to buzz, so that I began to suspect the loss of the queen. As this fear of mine proved false, there was no other explanation to be given, than that the bees were lacking fresh air, since the air contained in the large chest was not sufficient to renew the air in the hive.

Now every room, every cellar, and every enclosed room is but a box, larger, of course, in size, and the stocks placed therein may, even though the entrance be wide open, more easily suffer from want of air, than when the stock is upon its summer stand.

Strong swarms in box hives may have the doors raised, or removed entirely, and straw mats substituted. In Stebnik's the cylindrical formed hives are placed on their side, with the one end open, and the bees winter in it advantageously. I write this on these conditions, that the earth will absorb the carbonic acid gas, and thus purify the air. The degree of moisture in the air also plays a very important part in this matter. It will never be any injury to fill a pure white comb, having no appearance of mould, with water, and place it in the hive

either horizontally or perpendicularly. Even though the bees do not touch it, it will still produce moisture, and thus aid to produce healthfulness among the bees. DZIERZON.

Carlsmarkt, February, 1872.

### How Petitions are Manufactured.

At the request of several subscribers we insert the following letter, addressed to the editors of the *Beekeepers' Journal*, showing how petitions were manufactured this spring to defeat the supposed application of Mr. Langstroth from an extension of his patent.

Nashville, Tenn., 1872.

EDITORS OF BEEKEEPER'S JOURNAL:—In the April number of the *Journal*, over the signature of reporter, I noticed an article headed "The Tennessee Apiarian Society," about which I desire with your permission to say a word, and to make a few corrections in regard to the remonstrance mentioned there.

Now, whether those who presented the remonstrance were mistaken in regard to the facts concerning the extension, or whether they were governed by selfish motives, I leave for themselves to say. But it looks a little suspicious, when I inform you that at the meeting referred to by the reporter, there were but seven members present, five of whom signed the remonstrance. Of these five, four are inventors or improvers of hives or frames in which all the main principles of the Langstroth hive are included accidentally we presume; and the fifth, the Secretary of the Association, signed under a misapprehension of the facts, and has since renounced the whole scheme and will sign for extension. So much "for all the members but one and the president," signing the remonstrance.

Now, Messrs. Editors, I shall leave it to you and your readers to say, whether these *inventors* and improvers of the Langstroth principles were governed by disinterested or selfish motives in signing the remonstrance against the extension of the Langstroth patent, when it stands directly in the way of the manufacturing use and sale of their *own* hives, which they can neither use nor sell, on account of Mr. Langstroth happening to have invented the same principles fifteen or twenty years ahead of them.

But let us look at the arguments in favor of the remonstrants:

1st. Inasmuch as Mr. L. had not realized what he ought to from his patent, therefore he never would, consequently an extension would be of no benefit to Mr. L.

2d. That there was no assurance that those who had purchased a right to use the Langstroth hive, would not be compelled to do so again.

3d. That this (Langstroth) hive was the greatest incubus on bee-culture.

In regard to the first argument, let us say, that if the remonstrants consider this argument conclusive, we think they deserve the pity of every sensible man. In regard to the second, would it not have been more creditable for these remonstrants to have informed themselves on the rules

governing the extension of patents, than to have made such a splendid display of their ignorance, as to insist that those who had purchased the right to use, would have to do it again, when the fact is an extension does not effect the right of a previous purchaser to use. But as has been said, "When ignorance is bliss, 'tis folly to be wise."

The third argument advanced was said to have been explained by Mr. Owen, when called upon, in the following language: "Let any one attempt an improvement in bee hives and he is immediately set upon by the Langstroth faction as an infringer, and threatened with a law suit, and if any one wants a hive, and uses any other than the Langstroth, he is told that he must incur the additional expense of a Langstroth right, or lay himself liable to a legal prosecution; and he for one would be glad when this black mailing system was at an end and the inventive genius of American beekeepers would be untrammelled."

We think that Mr. Owens' language will fully reveal the spirit that governed the signers of the remonstrance. Now the trouble with this "inventive genius" class of beekeepers is, that they are not allowed to appropriate all of the important principles of the Langstroth patent to their own use, by attaching them to some peculiar shaped hive and then call it an improved hive, or give it some hideous name, and then pass it off on uninformed persons as their own invention; and because they are not allowed to appropriate with impunity, they consider themselves blackmailed and their "inventive genius" trammelled. Now we hope when the remonstrants learn that Mr. Langstroth has not even made an application for an extension, they will still consider their "inventive genius untrammelled," only so far as falsehood and misrepresentation are concerned.

#### REPORTER No. 2.

[For the American Bee Journal.]

#### The Miller and his Wife in Trouble.

KIND EDITOR:—I have some items which I will part with to our bee brothers, and at the same time ask others whether they too meet trouble almost daily, or whether things all go smooth and right with them? Well, I will take my text in the word trouble, commencing with TROUBLE No. 1. There is something wrong at the house, says my brother miller. Lock! your wife is knocking and pulling her hair at a fearful rate some fifty yards from the house, and your daughter with the babe is also taking steps for some safe place. Soon word came to the mill, to come and take care of the bees, they have run us all out of the house. I was soon at the field of battle and found my orders had been disobeyed. I had been extracting honey the evening before, and told my son to put the empty combs and frames into empty hives, closing them up tight.

He thinks it will do as well to put them up stairs, so up they went; but the bees soon found

their way to them, and in a very short time, the house and yard were filled with bees, and from some cause became angry and went for 'em.

I removed the combs and the first trouble ceased.

TROUBLE No. 2. George and myself almost out-generated.

As we have no particular house for our extractor, we pressed the old smoke house into service, closing the door and working by candle light, there being no windows in the smoke-house. But there was soon trouble on hands, the bees found some cracks and holes and in they came. This would not do, so we got paper and paste and papered our house, but still they came in under the shingles, &c., so we packed up our matters and left for the kitchen. There all went right when honey was very plenty, but when it got scarce they again found us out, coming in at places where we would not have believed they would. The floor was full; my better half stepped on one, but did not stay long with her foot on him. That was too much; "get out with your honey-slinger" was the orders, and as we always obey orders in the kitchen, for we are very much afraid of dish rags and broom sticks, we got out. But where shall we go? The smoke house was the only place we could think of, so more paper and paste was added.

TROUBLE No. 3 comes next. Our dear old friend Langstroth says in his book, page 308, "the gentleness of bees when properly managed makes them wonderfully subject to human control." This is very true as we all will acknowledge, but they appear to have such a love for honey that they cannot control their appetites, for they will break that commandment: "Thou shalt not steal." Some days I can hardly open a hive, for they follow me from hive to hive, so that I have to give it up for that day; they appear to know me and watch where I am going to open the next hive. As soon as it is open, they go on the old Dutch rule: "Every one help himself." I would rather they would wait until it is handed round. I think I love my bees as much as any man, but I am tempted sometimes to knock a chap down that wants to salute me with a kiss of charity. Sometimes they appear to have great respect for me, calling cousin and aunt in my ears. I think in the evening when honey is scarce is about as good a time as any to open a hive. But how Catharine Grimm managed to get one or two barrels out in a day, without having the bees after her, trying to rob, I can't see; perhaps she could tell me. I find they have not yet adopted the eight hour system, as they are on the look out late in the evening. When honey is very plenty, I know they are not quite so troublesome, but mine trouble me even then; who can give the time and plan to prevent this? Let us hear.

TROUBLE No. 4. For the last two weeks bees are again dragged out of the hive on account of the pollen of the milk-weed hanging to their legs. In October No., 1871, p. 87, of A. B. J., I thought it was false growth or natural deformity, but I have learned better since. See Quinby's book on bee-keeping, p. 82, where it is fully described. The American Agriculturist of New



York, has a picture of a silk or milk-weed flower, also a bee magnified with the pollen of the milk-weed adhering to his legs, which is worth examining. There is an article in the Cincinnati Times, No. 33, July 25th, 1872, stating that two apiarians of Utah deny it to be the pollen of the milk-weed, and recommend us not to destroy the weed. They say they have found it on the legs of young bee that have never left the hive. This can all be, and yet the milk-weed pollen be the cause of the trouble. My bees work lots of it off their legs during the night, which if a young bee comes in contact with, will also cling to its legs. I have caught some bees which others were dragging out of the hive, and took a pin and cleaned their legs of the pollen, then let them in, and they were unmolested. Mr. Editor, enclosed please find some of the pollen of the silk or milk-weed that my bees have worked off their legs and thrown out; perhaps it is old to you; if so cast it away without a look.

**TROUBLE No. 5.** My honey plant spoken of in the A. B. J., of October, 1871, p. 87, played off on me this year, or I was mistaken last year about its blooming early. I wrote my article August 10th, 1871, and said it was in bloom long ago. This year I watched it closely, and it only commenced blooming about the 1st of August. Last year was an earlier spring and harvest, which may account for its being also earlier. It is therefore rather late to fit in between spring and fall pasturage.

**TROUBLE No. 6.** I can't come within ten feet of Gallup and Hosmer. I have Langstroth and Gallup hives, weigh them every evening on as true a scale as can be bought. During clover and bass wood, the highest I ever received was eight pounds. Quinby says, p. 84, 3½ pounds is the greatest weight he has ever had, but I suppose Quinby did not extract at the time he wrote his book, he can no doubt do better now with the extractor. I did perhaps not extract as often as I should have done. Next year, if I live and keep my health, and my bees live and keep their health, I intend to extract one hive very close, but keeping them strong, and test the truth of some of those large yields of honey. To my mind, at least, bees will work as much for me as any other person. Bee-pasturage will make some difference in different localities. I am aware of this, but I have white clover, linden or basswood, cherry, peach, apple, raspberry, golden rod, and lots of other fall flowers, the names of which are unknown to me. Swarming was very scarce with us this year. I had one on the 15th of July. Reuben Hale, my neighbor, had one on the 27th. William Markle had three. I do not consider this an excellent year. Cold and late spring, wet summer, with cold nights, is in my opinion not so good for bees, yet I cannot complain of it being a poor season. Good will to the Editor and all his readers.

A MILLER BUT NOT A MOTH MILLER.  
Duncan's Mills, Fulton Co., Ill., Aug., 1872.

Italian bees are not so much disposed to rob, or so liable to be robbed as black bees.

[For the American Bee Journal.]

### The Song of the Queen.

It is a long time since it was discovered that a queen could sing. Many of the readers of the A. B. J., have heard the song of the young queen the night before swarming. It is generally believed that when the young queen is hatched, the workers prevent her from emerging from off the cell until the departure of the old queen, and that she shows her impatience by this plaintive song.

This is not always the case, for I have actually seen a queen out of the cell in the act of singing. It happened in this wise. I was opening a pure Italian stock, that had swarmed on the day preceding, for the purpose of removing the capped queen cells which the hive might contain. I found in one of the frames a queen cell, from which a queen had just hatched, and almost at the same instant, I heard the song of a queen on the frame that I was holding. I turned the frame over and over several times, but in vain. All at once the song began again, and I caught the queen in the act.

She was standing on the comb, perfectly still. When singing her abdomen was slightly distended. What was the cause of her complaint I am unable to tell; and after stating the fact I will retire and let others explain.

The season here has been very poor. Harvest lasted only from the 18th to 30th of June. Extra stocks harvested from 50 to 70 lbs. box honey. Average 15 lbs. per colony.

My father started for Italy, on July 9th. He will be back by the 10th of September with more queens than have ever been imported into this country before. Indeed American Bee keepers must be very foolish to spend so much money for such a humbug as the Italian bee. What do you think of it, Mr. NATIVE?

C. P. DADANT.

Hamilton, Ill., July 12, 1872.

When the queen-bee is forcibly taken away from the hive, the bees which are near her at the time do not appear sensible of her absence, and the labors of the hive are carried on as usual for a time. It is seldom before the lapse of an hour that the working-bees begin to manifest any symptoms of uneasiness. They are then observed to quit the larvæ which they had been feeding, and to run about in great agitation to and fro; and on meeting with such of their companions as are not yet aware of the disaster which has befallen them, communicate the intelligence by crossing their antennæ and striking lightly with them. The bees which receive the news, become in their turn agitated, and spread the alarm further. All the inhabitants now rush forward, eagerly seeking their lost queen. But finding search useless, they appear to become resigned to their misfortune, the tumult subsides, and if there are worker eggs or young larvæ in the cells, preparations are made to supply the loss by raising a new queen, and the usual labors of the hive are resumed.

[For the American Bee Journal.]

**Mortality of Bees in Illinois.**

There has been great destruction among bees in this country. Hundreds of beekeepers have lost from one-half to all they had during last winter and spring. Full seven-eighths of the number that went into winter quarters have perished and have generally left plenty of honey. I am quite satisfied that this wholesale destruction was mostly from bad management, or rather from no management at all.

I will give my experience in preparing for the winter. I gave a brief account of our honey season of 1871, in A. B. J., vol. 7, p. 135. It was in the forepart of September that I found the crisis was coming, for the honey drouth of July and August was so severe, that the bees were consuming more honey than they were gathering, and that the queens had nearly ceased laying. Early in September, I found they were gathering honey very fast from Smart weed (*Polygonum Hydropiper* L.), and were filling the brood cells, leaving but small spaces for queens to lay their eggs in. I concluded at once that if permitted to go on thus, I would soon run out of bees. Having previously obtained a Hru-chka from the National Bee Hive Company, of St. Charles, Illinois, I commenced extracting the honey out of the chamber, and supplying the upper chamber with empty combs, and I use the two-story Longstroth hive. This soon gave the queens room for laying, of which they soon availed themselves, keeping the stocks up to full standard. By this means they were fully prepared for winter both in bees and honey. When the time came to fix them up for wintering, I prepared them as I stated in my former letter, and they came through all right, in the spring without the loss of a swarm. Since I have adopted wintering them on their summer stand with proper protection, they have not been troubled with dysentery.

This season has been very dry, and the honey producing plants have yielded but little nectar. If the fall pasturage does not prove abundant, like last year, we will have to feed our bees for next winter.

I would like to have correspondents give the name of their county, as well as their State and post office. I would be glad if every beekeeper passing this way would give me a call. My fare, though humble, is always free to such. If they cannot learn something maybe I can. Send on the Bee Journal. We are never too weary to read it.

H. W. WIXOM.

Mendota, La Salle Co., Ill., July 20, 1872.

[For the American Bee Journal.]

**Impudence of Beeking.**

In the July number of the BEE JOURNAL, is an article with the above caption (which by the way, should have been headed Impudence of beekeepers), which contains some right and some wrong. As a general rule only successes are

reported, and every year many poor victims dazzled by the idea of clearing \$40 or \$50 per swarm, go into the business only to be disgusted with it. The harm done is not to the beekeepers but to the victims. Let both be fairly reported, let them have some idea of the amount of sweating they will have to do in handling bees in hot days, of the number of stings to be endured even from "amiable" Italians; of the number of disappointments and vexations when the bees will do just the reverse of what is desired or expected, and then let them know that if they fight through all this, read good books and papers, and learn the trade, there is honey for them. I have no interest in keeping bees, only pleasure and honey. I have neither bees, hives, nor queens to sell, but so long as millions of dollars worth of honey goes to waste every year, for want of bees to gather it, we should be large hearted enough to desire the greatest good to the greatest number.

But is it true that we shall suffer by having new comers in the field? Is there less money to be made in honey now than when less were gathering it? Compare the price of honey in the comb in different sections with the price ten or twenty years ago. Years ago the same cry was raised about fruit, "the market will be overstocked and it will bring nothing." To-day I cannot buy any fruit for less than three or four times the price I could when a boy, in the same place. I want enough intelligent beekeepers to come into the field, so that a regular market may be established not subject to great fluctuations; so that a staple article, found on the table of the poor as well as the rich, not only when company comes, but as a regular article of diet.

C. C. MILLER.

Marengo, Ill.

[For the American Bee Journal.]

**Bee Notes from Morrison, Ill.**

Mr. EDITOR:—In the May number of your Journal, "B" heads an article "Dronings," and takes out a patent on the caption, but gives his readers no specifications or limits; now I wish to find a little fault, or rather make a suggestion to the Editor of the Journal—that to beekeepers a most valuable requisite would be a department of "hints." \* \* \* \*

The spring has been cold and backward—business among the bees has made but slow progress with what few we have left—a great disaster having befallen beekeepers in this region and left many yards empty of their joyous workers—where last season stood many hives of industry, can now be seen standing or lying around the monuments of departed sweetness; many apiaries are gone entirely.

Of 35 good stocks last fall, I came out this spring with two, one in a box and one in a frame hive. One of my neighbors lost 50, all he had. A man near me that does not believe in the science of bee-culture, and does nothing but let his bees alone, only lost one out of nine, all in old box hives, and black bees, and standing out

in as bleak a place as can be found in the country. The dread disease, dysentery, has taken our workers. Here comes in another wish that we had known of Novice's idea or knowledge of feeding sugar syrup in the fall. Here is where a "hint" would have been very valuable.

Now a suggestion. Mr. Duffield, on page 262, vol. 7, says: "If all the hives had the same size frames, &c., it would do an immense good. When can the beekeepers of the country have a better time to get uniformity in the size of frames than now? I for one am in favor of it, and am willing to adopt some standard, so that we can the quicker repair the damages should disaster again come upon us. What say you beekeepers, shall we do it?"

Another suggestion: It is pleasant to read reports and doings from different ones as to seasons and prospects, results, &c., and one likes to read understandingly as to latitude and longitude, and when one reads an interesting item or article that has reference to bees, it is very unpleasant (to me) to have the writer's name only, or name, town and State; it is sometimes very agreeable to know the *part* of the State, all towns and post offices are not on the maps, but the counties\* are, and so give us the counties and date in all articles, that we can form a better judgment and better comparison with our own localities. \* \* \* \*

Novice, in the June number of the American Bee Journal, asks his western friends a question, if the bees died with the disease *after* they begun to fly in the spring.

Now I can answer from the book. In the last week in February, we had warm, pleasant weather, and for some few days in the first of March bees flew splendidly. I had then nineteen stocks. I put out rye flour, and they carried in some. I began to feel happy in my sorrow, to think I had some capital left upon which to begin business again, but I was joyous too soon. We soon had a cold, wet and freezing time, that made everything tight, and my little pets began "passing away," some days one swarm, other days two or more, until I only had but two remaining. I lost the last on the 3d of April—my last Italian swarm, sorry I was, indeed, then. I looked among the dead and found the royal bird, and with an unpleasant sensation I spiked her with a pin, and have her now in my case. One favor from you, Mr. Editor—give us the Journal twice a month during the summer at least. We will pay you for it. That every subscriber may meet with success with his bees this season, is the earnest wish of

F. W. CHAPMAN.

Morrison, Whiteside Co., Ill., June 11, 1872.

\* We thought we were over liberal in giving, whenever possible, the name of every contributor and his address; but it seems from this and another writer in this month's Journal, that we have committed the sin of omission. Well, we shall try to amend. Our practice is contrary to that of nearly all other papers who give the county, but carefully conceal the residence of the writer—dreading that their subscribers and contributors may be enticed away by competing journals, a fear which we never entertained, and which experience has taught to be groundless.—Ed.

[For the American Bee Journal.]

### Things of Real Merit.

The R. R. Murphy improved extractor, is hard to beat, not breaking or cracking the tenderest combs. In fact it is about as near a perfect machine as can be. Next is the new honey knife of J. L. Peabody, very thin, concave in shape on the one side, and of course convex on the other. This you will readily see allows a very thin blade and still prevents springing. It works the best of any one yet seen in that line. Mr. Peabody has only sent out a few on trial, and has none for sale this season. Next is Mr. Adair's befeeder. For cheapness and efficiency it is just the very best thing in that line I have ever seen. Two of those fitted into my nuclei hives feed four nuclei, and the cost is not over 2 or 3 cents each, and they take up no room in the hive, as they are fitted into divisions between the two nuclei. Now, Mr. Editor, I am not bribed to give those things a puff, but beekeepers are inquiring after them privately, and I prefer to answer them publicly. I have Mr. Adair's new idea hive on trial, and shall report as soon as convenient, just what I think of it, even if some of my friends should get into spasms. I also built three hives of the same form, containing my own combs, and have them on trial.

E. GALLUP.

Orchard, Iowa.

[For the American Bee Journal.]

### FROM NORTHWESTERN OHIO.

#### A Visit to Dr. Sanford's Apiary.

Wearied with professional duties, and tired of confinement to the office, under the sweltering heat of the first week in July, with the thermometer at 98° in the shade, I resolved to take a stroll by way of recreation, into the suburbs of our pleasant village (having a population now sufficient to claim city honors). After a half hour's walk, I found myself at the apiary of Dr. S. Sanford, which is situated on the east bank of the Ottawa river, and just without the city limits. The apiary is located on ground gently sloping to the eastward, and protected from the west winds by the bluff at the river's edge; making a delightful situation for an apiary. My natural love for bees, together with the interest always awakened by having the care and management of the "little pets," impelled me to make a tour in the apiary. I found the doctor among his bees, and after a short time, within which to rest and cool off, he kindly showed me through his apiary, and as it may be interesting to some of your readers, I will give a brief detail of what I saw and learned there of his mode of keeping bees.

The doctor put into winter quarters eighty-three colonies, of which number about fifty



came out in first rate order ; thirty or thirty-one were in bad condition, being weak in numbers and in stores, having suffered from the "dysentery," and two were dead. His loss was very small, compared with that of the beekeepers generally in this section of the country, as most lost from fifty to one hundred per cent. of the number they had last fall. Those that were weak, he stimulated by early and constant feeding, until there was forage for them to gather, and at the date of my visit there was not a single hive which did not seem crowded with bees and rich with stores ; excepting those only, from which he had very recently extracted the honey, and they were rapidly filling up with "liquid sweets."

He is using the extractor upon twenty-eight hives, leaving the residue to store box honey. And here I may mention that I never saw bees take to the honey boxes with so little apparent reluctance, as the doctor's bees do ; which I can account for, only by ascribing it to the kind of box which he uses. They are sectional, and capable of being enlarged to any size to conform to the size of hive upon which they are to be used, and may also be reduced to the size of a single comb. The bottoms are made of slats, such as are used in making frames for the brood chamber, and so arranged as to set over the frames in the brood department, but three-eighths ( $\frac{3}{8}$ ) of an inch above them, thus making them of easy access to the bees. The bees seem to consider the surplus as a part of the main hive, judging from the promptness with which they build comb and store honey in them.

The doctor does not rely upon natural swarming alone, but swarms his bees at his own pleasure. His plan is as follows : He takes an empty hive and sets it in the place occupied by a full one, which we shall denominate No. 1 ; then he removes the combs from No. 1, and brushes the bees and queen all off in front of the empty hive, and returns the combs to No. 1 ; he then removes No. 2 (a full colony), and places No. 1 where No. 2 stood, and places No. 2 on a new stand. This is done while a large number of bees are absent in the fields, and appears to be a complete success.

We next examined his nucleus hives, and saw some queens which for beauty and size would be hard to excel. The hives in which the cells are reared, indicate by their numbers that the queen mothers are prodigies for prolificness, and their worker progeny fully attest their purity. The doctor is breeding queen bees to supply a special demand from customers, which he is unable to do in fall.

He showed me over two thousand pounds of extracted honey—taken from twenty-eight hives, which are of the number he had to feed in the spring, at three throwings each—which would make a man's mouth water.

He is selling full stocks as fast as he increases them by swarming, so that he will probably winter not to exceed ninety colonies this winter. His receipt against loss in winter, as well as for a large yield of honey, is to "keep your colonies always strong in numbers, if you have to feed to accomplish it," and I am induced to accept it

as an axiom, as his experience is to me conclusive proof of its correctness.

J. E. RICHIE.

Lima, Ohio, July, 1872.

[For the American Bee Journal.]

### On the Utility of Drones.

A distinguished writer once said : "A coxcomb is a drone in the human family." Beekeepers might say with as much truth that : "A drone is a coxcomb in the bee family." Truly drones are useful, but only to a certain extent. If we ask Madame Nature why she caused so many drones to exist, she will answer that in a wild state hives are far apart and that a large number of drones are necessary to insure the queen's fertilization. Indeed, Madame Nature never does anything to no purpose.

But in our present state of bee culture, hives are numerous and close together, for we see sometimes as many as three or four hundred stands together on an acre of ground. Many apiaries number over fifty colonies. In these places a large number of drones is undesirable. The usual amount of drones hatched by three hives would be sufficient to insure fertilization of as many queens as can be raised in one apiary. An apiary of one hundred hives probably raises twenty times as many drones as necessary. These drones are not only useless, they are also noxious. First, they consume a great deal of honey and require from the bees a great deal of care. Then they are always in the way during the working season, obstructing the entrance with their clumsy bodies. Besides, after the harvest is over, they have to be destroyed by the bees. Some people say that they are very useful to keep the brood warm. But I will beg my readers to notice that drones never exist except at times when the weather is so warm that it takes but very few bees to keep sufficient heat in the hive. Experienced beekeepers also know that the bees drive them away from the brood, and destroy them as soon as the harvest ceases.

What then shall we do to destroy the large amount of drones that hatch in our hives every year ? The old fashioned beekeepers say : "Cut their heads off before they hatch." But this gives a great deal of work for the bees in cleaning out the cells. Besides, all the honey spent on these drones is dead loss, and the combs are still there for the queen to lay in at the first opportunity. Drone traps are out of the question for the same cause.

Once upon a time, there was a man who travelled through the country selling patent hives and the six secrets of beekeeping. One of his secrets taught how to prevent drone laying. His method was simply this : "Cut out the drone comb." Was it not a miraculous invention ? The poor wretches that paid \$10 for the knowledge of the famous secrets probably pondered more than once on the truth of the old saying : "Nil sub sole novum." (Nothing new under the sun.) Still, they did cut out the drone comb ; but, alas ! the bees immediately went to work

and built it all over again. They would have drone combs by all means. What then shall we do? Why cut it out and replace it with worker comb. That was not very hard to find either, and it has been done more than once.

Let us now see the advantage of replacing drone with worker comb. In May, a good hive measuring 1,600 square inches of comb in ordinary circumstances, will contain about 1,100 square inches of worker brood, and 100 square inches of drone brood. During the harvesting season, therefore, it will contain 5,500 workers and 3,200 drones. This hive will perhaps gather 50 pounds of honey, if the season is good. Let us now replace these 100 inches of drone comb with 100 inches of worker comb. Then with no more trouble and no more cost, we will raise 5,500 workers instead of 3,200 drones. (There are 50 cells and 32 drone-cells per square inch. See Langstroth, p. 74.)

If 5,500 workers gather 50 pounds of honey, 6,000 will gather 54 6-11 pounds; gain will be 4 6-11 pounds, which, at 25 cents per pound, will bring \$1.15.

Beekkeepers, does this pay?

C. P. DADANT.

Hamilton, Ill., Aug. 1, 1872.

[For the American Bee Journal.]

### One-Story vs. Two-Story.

Gallup, why in the world can't you let us use the "new idea" in a two-story as well as a one-story hive? If I am not mistaken, the patented features of the idea is to give the queen plenty of room. Now, if the queen prefers to keep her brood at the bottom of the combs in mid-summer, let her do so, by continually removing combs of brood from the lower to the upper story, and thus gain the same point as with the double width one-story, namely, having constantly room in the centre and at the bottom.

The bees will take care of the brood in the upper story just as well as in the lower, and my queens persist on going into the upper story to lay, although they have only two-inch auger holes to go through. I think likely Novice's plan of having no division between the two stories is better.

A few years ago, Mr. Marvin or Mr. Baldridge told me he intended making a double width Langstroth, but as I have never heard anything about it, I do not suppose he found any great advantage in it.

Say, Gallup, aren't you a little mistaken about that 1,000 pounds from one hive?

C. C. MILLER.

Marengo, Ill.

A German writer says, "much time is saved in using tobacco smoke, and different other tools." His help uses 150 pounds of tobacco a year, besides this he smokes himself a quantity of cigars.—HULLMAN.

[For the American Bee Journal.]

### The Season in Virginia.

MR. EDITOR:—I have to report a poor season for honey. Forty stands have not yielded more than half the honey I obtained last year from twenty-two. The drought set in so early as to cut short the crops of white clover, and our bees ceased to gather honey by the 25th of June.

It would gladden your eyes, however, to see one piece of fancy work I have—even Novice, I think, would open his eyes at a glass shade two feet high and ten inches in diameter, filled completely with beautiful honey, at least thirty-five pounds *net*. I propose to take it to our fair in Richmond this fall and hope it will stir our people up to the beauties, if not the profits, of apiculture.

I have only one stand which yielded as much as 75 pounds of box-honey; (I have never tried the extractor), and that is a hybrid, three removes from the pure queen. The fancy piece was made by unadulterated blacks, but from the slight opportunity I have had of testing the comparative merits of the two species (blacks and Italians), I lean decidedly to the latter.

B. J. B.

[For the American Bee Journal.]

### Fastening Combs.

MR. EDITOR:—Having fallen upon a plan for fastening combs in the frames in transferring bees, which I have not noticed mentioned in the Journal, I will give it for what it is worth: Take strips of tin,  $\frac{3}{8}$  of an inch broad, cut them to such lengths that they will extend on the comb  $\frac{1}{2}$  inch, after being placed upon the frame at any distinct point, bringing the two ends around the corners of the upright, or any other point where the operator chooses to place them, forming right angles, bringing the ends of the strips in contact with the comb, which strips, if desired, can be pressed slightly into the comb, and will be amply sufficient to hold the combs in place, though filled with brood or honey.

Bees have done nothing extra here this season as yet, and have thrown out but few swarms. Some in old box hives have not had a swarm, and no surplus honey. I have doubled my number by dividing. I have ordered a honey extractor of Mr. J. T. Peabody, of Bloomington, Illinois, but do not expect to find much use for it this year, unless the fall season is better than the spring has been. As regards numbers, the balance is in favor of the black bees in this locality. I have some eight or ten queens from an imported queen, purchased from a neighbor of mine, at \$16.66, whose workers do not compare favorably with those from queens reared from a queen I purchased from Mr. Peabody last fall, which queen became a drone layer early this spring, before I could get her to stock her hive with workers.

Since I have mentioned this subject, I will

state that I informed Mr. Peabody of it, and that he has promised me that if he succeeds in raising some fine queens, he will send me one.

B. F. WIGGINTON.

Scottville, Ill., July 14, 1872.

[For the American Bee Journal.]

### The Summer in Orchard, Iowa.

DEAR BEE JOURNAL:—You will probably wish to know how the bees are doing up in this part of the heritage. My first swarm came out June 2d, and here was the trouble with the Italians. They would rear brood and swarm when they could not gather enough to build any comb whatever. I therefore used what spare comb I had, and bought some of my neighbors, and then had to suppress swarming entirely. Not one square foot of comb was built in my apiary up to July 11th, by either stock or swarm, excepting by one swarm in the Adair section hive, and that swarm I fed all they could consume, as I had no comb to spare for that hive. By the way, I may have something more to say to the beekeepers about hives this winter, even though it may cause my friend Furman to have another spasm.

July 11th. The bees commenced gathering honey, and I then set nearly every stock to building comb. My old thirty-two pounder gathered one hundred and twenty pounds in just six days. They had no combs to build. I have now, July 24th, extracted fourteen hundred pounds. Yesterday and day before, it rained; to-day they have gathered rapidly, and I have commenced going over them again, and find them all full. The first crop of Linden dried up or blighted, but the second crop is doing better; still, the season thus far, is no comparison to the seasons of 1870 and 1871.

E. GALLUP.

Orchard, Iowa.

[For the American Bee Journal.]

### Transferring Bees.

Perhaps many persons would do better not to transfer bees. If you have only box hives, by all means transfer at least one; but if you have part box and part frame, you can keep the box hives busy making swarms. This spring, I had five box hives and two weak frame hives. I have placed the box hives on empty frame hives, obliging the bees to go down through the empty Langstroth, and then when they were strong enough to spare a swarm, I removed the box hive to a new locality, a rod or two distant, and put a frame or two of brood into the empty hive, when the returning bees from the box hive made a moderately good swarm. If I had a queen ready, I gave them one as soon as they had started queen cells. One box hive was made with feet, so I bored a hole in the bottom of a Langstroth hive, and placed it on top of the box hive, fastening the entrance to the box, and

obliging the bees to go up through the frame hive. I found I could take a swarm from each box hive once in two weeks, if honey yielded.

C. C. MILLER.

Marengo, Ill.

[For the American Bee Journal.]

### The Honey Yield in Milledgeville, Ill.

We take a little leisure to write a few lines for your valuable journal. Out of thirty-four stocks of bees put into the cellar last fall, on the first of March, we had twenty-four remaining. They were quite feeble, but gained slowly during May. From the blossoms of the fruit trees, I did not realize much. Clover yielded but little honey. The hive placed upon the scales denoted a gain of but one or two pounds a day until about the 10th of July, when I came to note an increase, up, up, 3½, 4, 5, 6 and 7 pounds. The 11th of July, eight pounds was gained. Novice like, I looked in earnest to see from what source this change comes, when I see the bees come nearly all from the east loaded with Linden honey, from a grove one-and-a-half miles away.

July 12th, 9 pounds gain noted.

" 13th, 10	" "	" "
" 14th, 9½	" "	" "
" 15th, 8	" "	" "
" 16th, 6	" "	" "
" 17th, 2	" "	" "
" 18th, 0	" "	" "
" 19th, 0	" "	" "

Since the 19th a little loss has been sustained.

We use the extractor with two sets of frames. We could not dispense with the frames. One can hardly conceive the satisfaction they afford, until they have tried them. We have been suffering from a drouth, but things look bright now from a recent shower, and we look for better times for bees. Friends Marvin, Lee, Hubbard, and a host of others, let us hear from you a little oftener.

With many good wishes for the Journal, we remain its friend.

F. A. SNELL.

Milledgeville, Ill., July 22, 1872.

[For the American Bee Journal.]

### Supers.

After an experience of three seasons with nearly every variety of SUPER, I still cling to the Colvin chamber, as by far the best means of gathering surplus honey. This chamber gives you the double advantage of a large receptacle, with a facility of subdivision (through the small movable sections of which I spoke in a former communication) equal, if not superior to any box arrangements, and solves the difficulty as between large and small receptacles so completely, that I wonder the system is not more generally adopted.

Alley's hive, I am obliged in justice to say,



has done admirably well this season. All the boxes (nine on one side, and eighteen on the other, the first holding, say, six-and-a-half, the other two-and-a-half pounds) except two, have been filled with first class honey. I would advise all my brethren to try at least one of these hives, and I think that (like myself) they will be induced by results to increase their orders. For *side delivery*, I consider it superior to anything I have ever seen, though still adhering to the opinion expressed above, that for *supers*, the Colvin chamber is unsurpassed.

B. J. B.

Barboursville, Va., Aug. 6, 1872.

### Central Iowa Beekeepers' Association.

The Beekeepers' Association of Central Illinois, met in special meeting, at Lexington, McLean county, July 18th, 1872.

#### MORNING SESSION.

President, S. C. Ware, of Towanda, in the chair; J. Sawyer, of Normal, appointed secretary *pro tem*.

Messrs. Brooks, Peak and Price were appointed a committee to prepare questions for discussion. In the absence of the committee, the president made an interesting address upon the general subject of bee-culture, speaking particularly of the "New Idea" Hive, in which honey boxes are discarded. The committee presented the following report, which was adopted:

1. The best method of wintering, and spring management of bees.
2. The best method of increasing stocks and securing the greatest amount of honey.
3. Where, and how to transfer.
4. Is the frame hive superior to the box hive?
5. Is the Italian superior to the black bee?
6. General remarks on bee-culture.

Discussion on hives continued by the president, Messrs. Brooks and Reynolds.

#### AFTERNOON SESSION.

The convention proceeded to discuss the following topics:

1. The best method of wintering, and spring management of bees.

Mr. Cole stated that he had wintered twenty-five colonies on their summer stands, with the loss of five colonies.

Dr. Shilling moved his bees from the summer stand, and placed them near a fence, gave lower and upward ventilation; had fourteen colonies; lost none.

Mr. Brooks extracts all the honey from the two centre frames before putting bees into winter quarters; thinks this a successful method, as the bees need empty cells in the centre of the hive, that they may cluster in winter and generate heat; also recommends the making of a small hole in the centre of each comb, about four inches from the top of the frame, for winter passage for the bees.

Mr. Ware—Hives must have young bees to winter well; advises the use of the honey extractor on all hives having a surplus of honey in

the fall, but leaving enough for the use of the bees in winter; also recommends the taking out one frame from the hive and placing the other frames at equal distance from each other; feed bees in spring a little each day (whether they have honey in the hive or not), to stimulate breeding, so that a sufficient quantity of young bees may be had as early as possible to gather honey in its season; otherwise the profits of the hive is a failure.

Mr. Brooks would stimulate, not only with honey fed into the hive, but by giving them early in the spring, until they can get propolis, buckwheat, rye flour or Graham flour, placing it in troughs so that bees can get it easily.

Rev. Mr. Luccock said bees will take corn meal in preference to any other flour. Winters his bees in the house with success; puts a cloth over top of frames, pours a syrup on it for hive feeding in spring and winter.

Mr. Ledgerwood recommends a covering made of wire cloth placed on the frames in continued cold weather, so that the bees may discharge thereon; his plan is to remove the hive to a warm room long enough to warm the bees, when they will ascend to the wire cloth and empty themselves; the cloth can then be removed and the hive returned to its place.

Second topic—The best method of increasing stock, and securing the greatest amount of honey. Mr. Anderson said large colonies are needed for the largest amount of surplus honey.

Mr. Brooks increases stocks by first removing the old hive some distance from its stand, and putting in its place an empty hive with frames properly arranged; he then opens the old hive and removes a frame of brood with adhering bees, together with the queen, which he places, after removing an empty frame therefrom, in the centre of the new hive. The empty frame is then placed in the centre of the old hive, the hives closed, and the process is complete; would give the old colony a queen cell if he had it at the time of dividing, if not, would open the hive ten days after the division and destroy all queen cells but one in the queenless hive.

The rule expressed by other speakers for increasing stocks was to have small hives and good queens.

Third topic—When and how to transfer. Mr. Ledgerwood, transfers in the spring of the year, as soon as warm enough to handle; transfer straight combs into frames, the cells the same side up as in the old hive, using a transfer board to lay the comb upon when transferring the comb.

Mr. Brooks said the safest plan, as a general rule, is to transfer when there is plenty of honey in the field.

Fourth topic—Is the frame hive superior to the box hive? This being generally admitted, the topic was not discussed.

Fifth topic—Is the Italian superior to the black bee? Mr. Ware asks, are not black bees as good as Italians? The question was answered in the negative by a number of speakers, who said the Italians are more hardy, more prolific, better honey gatherers, &c., &c.

The question asked by Mr. Ware was more

for effect than anything else, he being a friend and advocate of the Italian bee.

Sixth topic—General remarks on bee-culture. Rev. Mr. Luccock said it was not always the largest cell that furnishes the best queen; he had small queens that produced his best workers.

Mr. Brooks said the fair-sized cells, as a general rule, give the best queens.

Remarks by different speakers.—Queen cells taken from new combs give brighter queens than those taken from old combs.

Avoid, if possible, handling queens with the hands, as the scent of the fingers endangers the life of the queen when replaced among the bees.

Keep the bees together in the hive.

Change combs often, else the bees will degenerate in size. Italian bees in the West are handsomer and larger than those bred from eastern queens, the preference being given to the chestnut colored queens, as they are nearer the color of early importations, and are better in every particular.

#### FORAGE FOR BEES.

Mr. Sleath exhibited two specimens of honey producing plants, Rocky Mountain bee plant, and sweet clover, said to continue in bloom a long time, and to be continually visited by the bees; their use was strongly recommended. Alsike clover and buckwheat were also recommended.

Mr. Sawyer, of Normal, exhibited the "Peabody" honey extractor, and demonstrated its merits by extracting honey before the association.

Mr. J. V. Books, of Lexington, exhibited an observatory hive of bees, in which the queen, as well as the other bees could be seen performing their several duties.

A subscription, amounting to \$3.50, was taken up to defray current expenses.

A number of persons signed their names and became members of the association.

On motion, the following committee was appointed to select topics for discussion at the next regular meeting of the association: W. G. Anderson, J. V. Brooks and J. L. Wolcott.

Report of a number of beekeepers of this and adjoining counties from spring up to July 18th, 1872, being a fair average report of the condition of bees in central Illinois.

E. Sager Hudson, transferred eight swarms in spring, increased to nineteen; no surplus.

Wm. P. T. Cool, Meadows, twenty-one old colonies; had five swarms; no surplus reported.

J. Hamer, ten colonies in the spring; had two swarms; but little honey.

J. H. Cox, Hudson, seven stands in spring; thirteen stands now, by artificial means; surplus, thirty pounds.

M. S. Sill, Blue Mound, three colonies; no swarms; hives all full; ten pounds surplus.

W. H. Anderson, Lexington, fifteen colonies in spring; have now thirty; no box honey; might have some extracted, if attended to.

S. C. Ware, Towanda, seventeen stocks; no swarms or surplus.

W. G. Anderson, McLean, eighty colonies; seventeen natural swarms; surplus 200 pounds.

J. L. Westervelt, Livingston county, eight colonies; seven swarms.

S. B. Ledgerwood, Forrest, fifteen in spring; fifteen swarms.

W. E. Price, Iroquois county, nine colonies; no swarms; no honey; hive covered with bees.

H. Peek, Normal, four colonies; four swarms; fifteen pounds surplus.

J. R. Nutt, three colonies; six swarms, surplus, two boxes.

Wm. Reynolds, Lexington, seventy-two colonies in fall, 1871; wintered them all in good condition; sold in spring, 1872, fifteen colonies; surplus honey in boxes, about 150 pounds.

On motion, the thanks of the association were given to the citizens of Lexington, for their hospitality; also to Messrs. Mahan & Co., for the use of their hall.

Adjourned, to meet in regular session in September, of which due notice will be given in the papers.

J. ANSLEY, Secretary.

J. W. GLADDING, Cor. Sec., Normal, Ill.

[For the American Bee Journal.]

#### The Yield in Bethlehem, Iowa.

MR. EDITOR:—It is generally conceded that extremes succeed each other. Last season's abundant yield followed by the present one of scarcity, goes to prove the correctness of the old saying.

The spring was remarkably cold and wet, confining the bees to their hives; even when a fine day did come the flowers did not yield honey enough for their brood. We had three days that bees worked upon wild cherry, gathering to each strong stock about ten pounds from that time until the 1st of July. There is no honey producing flowers of any considerable amount, as we have no white clover, and but a few acres of Alsike, that did not appear to yield honey. Last year the bees literally swarmed upon it. About the first of July, Linden began to come out, lasting about five days, yielding about the same amount that wild cherry did. After that we have had about a month in which there are no honey producing flowers in bloom, unless early buckwheat should yield the necessary supply, which I doubt; nevertheless my bees are in good condition, and ready to gather their stores, should an opportunity be given them to do so. Don't you think, Mr. Editor, that such a season as the present my bees suffered some from dysentery. I lost one stock *in toto*; had two queenless, one drone laying queen, and about twenty with not over three pints each to the swarm. Whole number reported 52—should have been 53. If defunct bees had been in demand, I think I could have supplied them by the bushel. I will give my winter's experience in a future number, in time for putting bees in their winter quarters. Novice thinks Linden never fails, with me 1870 and 1872, looks something like it.

FRED. CRATHORN.

Bethlehem, Iowa, July 15, 1872.

[For the American Bee Journal.]

## A Query and Remarks.

MR. EDITOR:—By this time I suppose you think I am very fond of asking questions. Like every lover of knowledge, I am not ashamed to let what I do not know be known. What I want to know this time is, if a queen is impure whose drone progeny is both black and Italians. This seems very strange, yet it is true. Some are marked very nice, but the stripes are dark, and others are entirely black, having no stripes at all. Her worker progeny are very nicely marked, all being of a uniform color and having three yellow bands. I raised some queens from her and they are also light, but I have not yet tested them. I watched the young drones as they came out and they are marked as above.

"Some beekeepers seem to be down on artificial queens. Well, I know nothing about their queens, but I do know that I raised some this season (black) that I would not give for some natural queens I have, in regard to prolificness. They may not be as long lived, and there are some that are not half as prolific as natural queens, but this ought not to discourage any one who intends to keep bees, for he must expect to have failures, and when he does fail in anything, he must not denounce it as impracticable, but try it again until he finds it is so.

C. E. WIDENER.

Cumberland, Maryland, July 22, 1872.

[Translated from the Bienenzeitung.]

## My Uncapping Instrument.

After I had procured for myself an extractor, I for some time uncapped the combs by means of a sharp knife. But this was too tedious work, so I set to work to invent a machine that would do the uncapping. To this end I constructed a cylinder 3 inches long and 1 inch in diameter, in which I placed pegs made out of strong wire, at such distances apart as would correspond with the cells of worker comb. With this I cut through the cover of the cells, the work going on very quick. But as the combs were often much injured by the pegs, I was not satisfied with the machine, and set to work again to remedy this evil. The idea then presented itself, that the covers of the cell being pure wax would readily melt. I took a small tin cup, put water in it and placed it upon a stove. When the water began to boil, I took the cup and gently slid it over the surface of the comb. And what joy! The covers at once dissolved and swam upon the honey. I place the thus uncovered combs in the honey extractor and took out the honey. The combs were quite clean, and were not in the least injured. The tin-cup being without a cover, the water cooled off so rapidly, that I was compelled almost every minute to warm it again. To remedy this, I had made an entirely closed box of tin in the shape of a smoothing iron. It is 3 inches long, 2 inches broad, and 1½ inches high, and contains about ½ pint of water.

On the top it has a small opening like a flask, in which to pour the water. This is stopped with a cork. A handle 4 inches long is attached to this.

With this instrument I uncapped my honey combs very readily, and since the water is shut in tightly, the instrument will not so easily cool off; I can readily uncover two combs without rewarming.

I hope that this instrument will lighten the labors of the beekeepers; any one can readily have one made for himself.

ADOLPH HELLER.

Kopidlno, in Bohemia, Sept. 20, 1871.

[For the American Bee Journal.]

## A Day with Novice.

MR. EDITOR:—In moving into Ohio, which I did last spring, I found myself in the vicinity of Medina, where our apiarian friend, Mr. A. J. Root, lives. I was not long in planning a visit to his apiary, where 8,000 pounds of honey, worth nearly \$2,000, were *slung* out of sixty-four hives, two years ago.

A ride by rail of two or three hours landed me at the place.

About the middle of June last, I found him doing his second day's slinging, and from the number of barrels in sight, I thought him a man of "great expectations." Mr. Root very kindly explained to me all that I desired to learn in relation to his ways and means "of conducting his apiary." I enjoyed the day exceedingly, and returned a wiser if not a better man.

Mr. R. has been using for several years an equal number of the American and Langstroth hives, but, after cool deliberation, has piled Young America with three patents against the fence, and uses nothing but the Langstroth, or Langstroth simplified.

I find him to be a good inventive mechanic, and his "tin corners" are a very important matter to beekeepers, and is the perfection of beauty and durability to the comb frame; only by seeing them in actual use can we gain a true idea of their beauty and utility. I do not know how I can do the beekeeping fraternity a better turn than by urging them to send for a set and try them for themselves. It seems to me they never can be superseded, for what is there of a bee hive but a movable frame in a simple box or hive? Nothing. Therefore he who contributes to make the Langstroth frame (there is none other) *better*, and the box or case easy for farmers to make and easy for them to handle the bees with, contributes to the general good; but he who dabbles in mothtraps, claptraps and fanciful notions, throws dust in the eyes while he rifles the pocket. I speak as a practical apiarian, mechanic, and hive manufacturer.

D. W. WHITING.

Shelby, Ohio.

For cleanliness and neatness, they may be a mirror to the finest dame.—BUTLER.



[For the American Bee Journal.]

## The August Journal.

The Journal came to hand, a few days earlier than last month, thereby enabling us to make a few comments "on time." We cannot speak from personal knowledge of the merits of the remedy for bee-stings, related by Mr. Langstroth, not having a fondness for *such* experiments. Our way is to "extract" the sting immediately, and then bathe the parts with cold water—the colder the better. If we get badly stung, when our blood is heated from over exertion, we make a strong whiskey sling, and drink it at once. We have no doubt but this would prove effectual in any case, yet do not get stung purposely, in order to try the remedy. Mr. Langstroth's experience with the Italians as honey gatherers, agrees exactly with our own. And, then, Novice has had trouble with the honey extractor, and we likewise. We had been studying a remedy, too, and think we shall adopt something similar. We can recommend Novice's door step, for we have used one almost exactly identical for the past seven years. They have *paid* us for all the time and trouble they cost.

Basswood was nearly an entire failure with us this year. There were only three or four days that it yielded honey of any account, and we have known our bees to gather more in one day heretofore, than they did in the whole three weeks that it was in blossom this year.

We do not attribute the failure to dry weather, but rather to the unfavorable state of the atmosphere at the time.

There was an item in regard to Novice's prolific queen, that we overlooked in our hurry last month. Was she reared from an egg or larvæ, and how many days elapsed after the bees commenced the cell before she hatched? We think that the most prolific queens are reared from the egg, and in such stocks as are *well stocked* with young workers. Mr. Liston discourses upon the advantages of artificial swarming, and nearly all apiarians will agree that the way the bees manage the things when left to choose for themselves, is not conducive to either pleasure or profit.

We take no stock whatever in "Management for Luck," but endeavor to manage our bees with a fixed purpose in view of accomplishing certain definite ends. Whoever manages bees with the expectation that "luck" will accomplish any desirable ends, will be apt to be woefully mistaken. Yet Mr. Chapman gives most wholesome advice.

We now pass on to listen to friend Argo's story of his failure to control pure fertilization. We are sorry that he is so dispirited as to give up *trying*; for we think that it is quite essential that we be able to *fully control* this matter. Where would have been our improved breeds of cattle, horses, hogs, &c., if man had not been "master of the situation." And if we can only control this little matter of fertilization in confinement, we can make as much progress as the breeders of our domestic animals have. It

may be "against nature" and even though "all attempts will fail," we are "*positively certain*" that the thing *can be done*. Not that we have discovered any method that will prove a success without a failure, but we have a plan, that we are sure—yes, "*positively certain*"—will be successful "nineteen times out of twenty," if rightly managed. But we don't use any fertilizing tent, wire-cloth cages, or any other expensive and complicated contrivances, either. The great secret as we believe is to bring queens and drones *together upon the wing*, without frightening the timid "fathers of the industrious hive." But as we have said but little upon this subject heretofore, we will not now leave it, with the remark that if any one wishes anything more from us upon the subject, that we will answer any questions through the Journal.

We are quite sure that many of the readers of the Journal would like to have friend Argo tell them how to increase thirty swarms to one hundred, and obtain so much honey, if the bees built their own combs. We have never, yet, equaled that, although having succeeded to our own entire satisfaction.

Friend Gallup must have been in a happy mood when he penned his "reply" or else possess a faculty for making things turn out pleasantly. That is right; let us all endeavor to cultivate amiable and friendly feelings, towards one another, work together for the good of all, and success, in the largest sense of the term will crown our honest efforts. We pass over the translations from the foreign journals, not that they are unworthy of notice, for we read them with interest; and hope you will, Mr. Editor, give them monthly hereafter. We notice one little mistake in our article last month; in the eighth line, after the words "Italian queens" read "with as much pleasure," and you will have our meaning. We now close, by wishing all beekeepers, prosperity in every *honest* effort to advance the cause of bee-culture.

HERBERT A. BURCH.

South Haven, Mich., Aug. 12, 1872.

Bees are scarcely making a living this year. I cannot account for it. All conditions are favorable now, although during May, usually our best month, it was very dry. Last year I had a hive filled in six days after extracting during the month of June. This year they have increased none during May or June. My hives are very strong; have sixty. Can it be a case of overstocking?

I feel very hopeful yet, as we usually have good fall pasturage.

G. W. BATES.

Somerville, Tenn., June 17, 1872.

A desolate and cheerless place is thus described by Southey, in his wild and wondrous poem of *Thalaba*:—

"The solitary bee,  
Whose buzzing was the only sound of life,  
Flew there on restless wing,  
Seeking in vain one blossom, where to fix."

# THE AMERICAN BEE JOURNAL.

Washington, September, 1872.

All communications and letters of business should be addressed to

GEO. S. WAGNER,  
Office of the American Bee Journal,  
WASHINGTON, D. C.

Our readers will read with pleasure the interesting letters of Mr. Dadant, published in another part of the Journal.

We publish in this month's Journal translations of two very able articles on the "Theory of Wintering Bees." We will endeavor next month to give some further translations on the same subject. The true manner of wintering bees has been attracting in Germany a great deal of attention, and given rise to some discussion. We hope that the results will be such that we will soon be able to winter our bees with certainty and safety.

The time is approaching when beekeepers will hold their conventions. We trust that those beekeepers who are members of associations will see to it, that they are conducted in the interests of bee-culture, and not in the interest of some patent-right men who wish to use the association as a means of advertising their patents. Just such conduct as this has brought no little disrepute upon beekeepers' associations. The only objects of the association should be the interchange of each other's experience, and the discovery of the best methods of conducting bee-culture.

We have received inquiries from Ohio, asking whether the Patent Office had granted a patent for a bee opiate. Upon inquiry at the Patent Office, we find that there has been; and in explanation of what to some may appear strange, we would say that the Patent Office is required to grant a patent for any new combination of materials made for the purpose of accomplishing some specific purpose, but that they in no case enter into a decision as to the merits or worthlessness of the combination. We give below the specification referred to, stating, at the same time, that it is patented, and cannot be used unless the right is purchased from the patentee or his duly authorized agents. As to its worth or worthlessness, we give no opinion.

UNITED STATES PATENT OFFICE,  
ALEXANDER Y. ROZENBURY, OF WATERLOO, INDIANA.  
*Letters Patent, No. 115,107. Dated May 23, 1871.*

IMPROVEMENT IN COMPOSITION FOR STUPEFYING BEES.

The schedule referred to in these letters patent and making part of the same.

To all whom it may concern:

Be it known, that I, Alexander Y. Rozenbury, of Waterloo, De Kalb county, in the State of Indiana, have invented a new, useful, and improved composition, or opiate, for stupefying bees; and I hereby declare the following to be a full and exact description thereof.

The nature or essence of my invention consists in the composition or opiate for stupefying bees described in the following specification:

To enable others skilled in making compositions to make and use my invention, I will proceed to name the several ingredients, and describe the mode of mixing them.

I put into a bottle or jug, that will hold one gallon, half a gill of the oil of anise, half a gill of the oil of peppermint, seven-eighths of a quart of alcohol, and mix them well together, and then add two quarts of water and one table spoonful of white sugar, and mix the whole thoroughly together.

To use this compound, put fifteen or twenty drops upon some rotten wood, or other material that will burn and make a smoke, and set it on fire, and blow the smoke into the hive, which will stupefy the bees so that they may be removed, or their comb taken out of the hive without the danger of being stung by the bees, and without injuring the bees, as they will revive again on being exposed to fresh air, or by blowing air into the hive.

Having described my new composition, or opiate, for stupefying bees, and the mode of compounding and using it,

I claim as my invention:—

The above-described composition, or opiate, for stupefying bees, compounded in about the above proportions specified.

A. Y. ROZENBURY.

Witnesses:—JAS. S. BEST and AMOS HALE.

Our beekeeping friends will readily pardon our departure from the bee-line of the Journal when they read the extract given below, and will join with us in wishing Col. Joseph Leffel and wife much happiness.

MARRIAGE OF ONE OF THE SMALLEST MEN IN THE WORLD—A PETITE PAIR—THE CEREMONIES AND CIRCUMSTANCES.—Col. Joseph Leffels is known by everybody in this vicinity. He is diminutive in stature, but remarkably active and vigilant in business, so much so that by faithful and earnest attention he has amassed a considerable competency. He is one of the bee kings of this country, and his success in the management of these industrious insects has been the subject of much comment among the bee fanciers.

Col. Leffel is 45 inches high, weighs 55 pounds, and is 38 years old. From these figures it may be known that his stature is diminutive. The colonel sports a handsome moustache and imperial, and unlike the other diminutives of Thumb, Nut, Dot, et. al., his face is manly and his features strong. His mind is fully developed, strong and vigorous as his years demand. It is strange that the colonel should live to this age a bachelor, but such is the case. The blandishments of the female sex have been thrown aside, and immersed in the cares of business, he has had no time to devote to the pranks of Cupid. But where is the heart that has not at some time succumbed to the smiles of woman. To love is human, to marry divine. The lady whom Col. Leffel selected as partner of his joys and sorrows is Miss Evaline Beasley, a young lady who is but five or six inches taller than himself, weighs 75 pounds, and is 23 years of age.

The wedding took place last evening, at the resi-

dence of Mr. Reuben Leffel, about three miles from Springfield. There were present at the wedding only the relatives of the bride and groom, and Mr. Harrison of this city. The bridal pair were finely dressed. The groom arrayed in a broadcloth dress suit, with white vest, and the bride in pink tarleton with flowers tastefully arrayed.

The marriage service was performed by Rev. J. Steck, of the English Lutheran Church, and was impressive and appropriate.

After the ceremony was performed the bridal cake was served.

The twain who are now one, will pass the day in the city with their brother-in-law, Mr. M. Irey, and it is contemplated that a tour to Kentucky, where the bride's relatives live, will be taken shortly. The congratulations of a host of friends and relatives are extended to the petite couple.—*The Springfield (Ohio) Advertiser.*

In the advertisement of Mr. M. C. Hester, of Charlestown, Indiana, in last month's Journal, the following error occurred in the Post-office address: "Chorlstown;" whereas, it should have been *Charlestown, Clark county, Indiana.* Any persons having written to Mr. Hester, and failed to receive a reply, will now know the cause of it.

### CORRESPONDENCE.

Bees came through the past winter weaker than usual; not much dysentery, so far as I have heard, about one-third ( $\frac{1}{3}$ ) as many swarms this summer as common, none of which have gathered sufficient stores for winter; cause, drouth. Very little surplus; less than I have ever known.

E. S. F.

Washington Co., Ohio, 8th mo. 12, 1872.

Bees are doing very poorly in this section of the country. There has been no increase of swarms, excepting a few near the timber, and less surplus honey up to this date, than for years past. The exceedingly dry season may have been the cause. White clover has been very plenty, but the bees have gathered no honey from it. This is the report at the Beekeepers' Association, which met at Lexington last week. Accept my best wishes for the prosperity of the Journal.

SAMUEL C. WARE.

Towanda, McLean Co., Ill., July 24, 1872.

The season in this county for bees has been a poor one, up to this date. The weather has been so dry that white clover dried up about as soon as it blossomed, and at this date, one-half of the bees have no more than one-half enough to winter on. They may better their condition before the buckwheat season is over.

L. BURDICK.

Galesburg, Kalamazoo Co., Mich., Aug. 5, 1872.

I am always glad to receive the American Bee Journal, and peruse its contents. In regard to bees in this section, I think one-half died during the past winter. In 1871, I lost thirteen colonies from twenty. In the past winter I lost five from seven. In May last, I purchased eight colonies, and now have twenty-two strong work-

ing colonies, and have two colonies that did not swarm. I have doubled a number of them. I have taken fifty-seven pounds of white honey from two of my young colonies, and this is as good quality as I ever saw. My bees are all black. I have started twice with Italians, and have lost them in wintering.

THOS. PIERCE.

Gansevoort, N. Y., Aug. 1, 1872.

We have had too dry weather, altogether, for either crops or bees. My bees, however, have made some box honey, and there is considerable in the second story, which I shall extract, as well as in the lower story, before buckwheat blossoms. I expect a good harvest from buckwheat, as my swarms are strong, and in good condition for work. I received a Peabody extractor from Mr. Alley, a few days ago, which I put to a use yesterday, that I had not thought of when I ordered the machine. We had a very heavy rain and wind yesterday, after which I noticed the cover of one of my two-story hives on the ground. Of course, the contents of the hive had received a thorough drenching. It was most dark, but I succeeded in emptying the water and unsealed honey from all the combs in the upper story, which gave the combs a chance to dry. I shall serve the lower story in the same way this morning. There are some other accidents in the history of that swarm, which I would like to speak about, if I had time.

E. KIMPTON.

Cedar Creek, Ocean Co., N. J., Aug. 16, 1872.

[For the American Bee Journal.]

### Michigan Beekeepers' Association.

The fifth annual meeting of this society will be held at Kalamazoo, September 17th to 20th, same time and place as State Fair.

The sessions will be held in the Court House. There will be two each day,—morning session at 8 A. M.; evening session at 7.30 P. M.; thus not interfering with attendance at the fair.

#### TUESDAY EVENING.

Address by President Rood. Subject, "The Progress and Needs of Apiculture."

#### WEDNESDAY MORNING.

Queens and Queen Raising. Paper by J. M. Marvin, St. Charles, Ill.

Paper by Rev. Wm. F. Clark, Toronto, Canada.

#### WEDNESDAY EVENING.

Mortality among Bees during the winter of 1871. Papers by J. H. Thomas, Brookline, Canada; Dr. G. Bohrer, Alexandria, Ind.; and Rev. J. G. Portman, Benton Harbor, Michigan.

#### THURSDAY MORNING.

Some Experiments. Paper by D. L. Adair, Hamesville, Ky.

Benefits and Methods of Artificial Swarming. Paper by Mrs. E. S. Tupper, Des Moines, Iowa.



## THURSDAY EVENING.

Something about Hives. Paper by E. Gallup, Orchard, Iowa.

Address by A. I. Root ("Novice"), Medina, Ohio. Subject, "The Apiary and its Arrangements."

## FRIDAY MORNING.

Voluntary papers and extempore addresses.

All the papers will be discussed, and other subjects may be proposed, at any time during the meeting.

Rev. L. L. Langstroth, father of Scientific Apiculture in America, will be present if health will permit. No subject is assigned him, as we shall all hope to hear from him on all subjects.

We are sure that we need add no other inducement to attendance, than the remark that all the above-mentioned papers are promised, and that Mrs. E. S. Tupper, and Messrs. Wm. F. Clark, A. I. Root, and Gen. Adair, all promise to be with us if business engagements will permit.

A. J. Cook,

Sec. Mich. Beekeepers' Asso'n.

AGRIC'L COLLEGE, Lansing, Mich., }  
August 9, 1872.

[For the American Bee Journal.]

Compton, Iowa.

MR. EDITOR:—Bees nearly all died out here last winter. I had the best luck of any one I know of; I saved twenty nine colonies out of forty-five. Most of those that had but a few colonies have given up the business in despair, partly because they lost their bees last winter, and partly because, with the old box hive, they cannot make it pay. I have eleven of the Quimby box hives, two Langstroth hives, and the rest in Quimby comb frame hives. The frames in the Quimby hives are 11x19 inches. The main objection I have to them is, that the combs are apt to break when extracting the honey, especially when full of honey. I think if they were put crosswise, as Gallup makes his, they would be better. Being a carpenter I made my own extractor; it cost me about \$9.00. I can use it quite readily. I have extracted about 250 pounds of honey this year, and have about 50 pounds in boxes. Bees did but little here till the first of July. I doubled up some of my swarms, as recommended on page 187 of the Bee Journal, and some of them I put in supers as recommended by A. Grimm. I like both plans very well. But I put a small swarm into a hive when they had swarmed once, but had become strong again; and the next morning I found my new swarm nearly all dead. I have been somewhat discouraged about beekeeping myself; so far I have not been paid for my trouble. I have taken great pains with my hives, and have tried to inform myself on bee-culture; and now that I have learned so much, I have to throw away what I have learned; so I think I shall try a while longer. The main bee pasturage here is white clover and buckwheat. I find I have to unlearn many things. I first studied Quimby and took him as my guide, but

I shall follow him no longer. I begin to have a mind of my own on the subject. My bees were very weak this spring, and the strongest made but little honey till the first of July, so I concluded the fore part of the season was a poor time for bees. I lost a large number of combs in frames by not knowing how to take care of them. When too late, I learned that burning sulphur under them would kill the moths. I do not think that bee-culture will be over done in this country; but few farmers will try the business, and but few of those that try will succeed. I keep my bees in a dry cellar in the winter. I never lost a swarm till last winter. The rats trouble my bees in the cellar. How shall I prevent them from hurting my bees and gnawing my hives. Mrs. Tupper says rats and mice will not trouble bees, but I know better by sad experience.

LA FAYETTE NORRIS.

Compton, Iowa, Aug. 6, 1872.

[For the American Bee Journal.]

## Bee Items from Oneida, Ill.

MR. EDITOR:—I think very likely there was considerable of a "smile" among beekeepers on reading Mr. Langstroth's quotation of Mr. Sydserff's remedy for bee stings. At least there was a big *smile* here. I am too much of a coward myself to stand and take sting after sting just to see whether he would stop the hurt and swelling of the first. I have been stung three or four times in my face, at one time, and and it will hurt and swell as bad as a single one.

I have read, that after one or two seasons of severe stinging, a person gets so inoculated with the poison that no swelling will follow the sting, which is true in my case. Last year and this year I received a great many stings, which at first would swell enormously, but now there is no swelling, unless on the front of my face, and then hardly enough to be noticed. The hurt is as severe as ever, though.

I use the deep frame hive, 10½x15 inches inside measure, and the brood is *not* at the bottom of the frame, but spreads from the top to the bottom, some of the brood cells being on the comb guide at the top. There is generally a small circle of honey in each upper corner, which grows larger as you leave the centre of the hive.

I hope brother Gallup will give us that promised article on wintering bees on their summer stands in time to utilize it, for it is impossible for me to winter them in any other way.

I think I shall remember my first experience with a honey extractor. I have one that I got up myself, and the first time we tried it, we put in a small piece of comb, forgot to put in the plug (which is at one corner), and set it whirling. The first thing we knew the honey was out of the comb, out of the can, and on to our clothes, the floor and table. You can believe we were satisfied *it would work*.

I suppose some speculating Yankee will be for importing some of those Australian bees, that have no stingers, but, if he does, he will have to put some *brass spurs* on to them (as they used

to do on the Shanghai roosters), or the other bees would rob them.

No profits, to any amount, from bees this season in this vicinity, unless we have a better harvest in September.

We have had rains and strong cold winds the large part of the summer, though he have had a few intensely hot days.

We have a little extra honey on hand, but dare not dispose of it, as we may need it to feed the bees on before winter.

There is two or three other bee journals taken here and I get them to read, but I like the dear old American the best of all.

W. M. KELLOGG.

*Oncida, Ill., August 12, 1872.*

[From the Sulphur Springs (Texas) Gazette.]

EDITOR GAZETTE:—Thinking that it will be interesting to your readers, I give you the proceedings of a meeting held here last night, for the purpose of organizing an association to encourage scientific bee-culture, and to promote the interest of those engaged in this branch of industry.

The meeting was called to order, Hon. W. H. Andrews in the chair; then proceeded to organize, by electing the following officers to serve until a permanent organization can be formed:

Hon. W. H. Andrews, of McKinney, President; John W. Crabtree, of Sulphur Springs, 1st Vice-President; W. G. Suggs, of Mt. Pleasant, 2d Vice-President; J. Hervie Sparkman, of Sulphur Springs, Secretary; J. M. Wester, of Sulphur Springs, Treasurer; Wm. Sickles, T. P. Garret, and J. M. Wester, Committee to draft Constitution and By-Laws.

The following subjects were then selected for discussion at the next meeting:

1st. The Italian bee, as compared with the black bee—its advantages and disadvantages.

2d. Moths—their habits, effect on bees, and the prevention of the same.

3d. The requisites of a good hive.

4th. The advantages and profits of scientific culture over the old (do-nothing) system of bee-raising.

5th. Texas as a honey-producing country.

The association then adjourned to meet at Sulphur Springs, October 15th, 1872.

We hope to see all those engaged in bee-raising, in attendance, as we intend to make the meetings of the association interesting and instructive, by the discussion of the topics selected. We also hope to have some essays written by scientific apiarists, on subjects of interest to all.

J. HERVIE SPARKMAN, Secretary.

*Sulphur Springs, Texas, June 21, 1872.*

[For the American Bee Journal.]

### The Season at Binghampton, N. Y.

We have had a very good season here. The bees have killed no drones yet. Alsike did well to start on; then we had a cold, wet week, just when white clover should have done the best, and it yielded none afterward. In fact, we have

seen one hundred bees in red clover this season, in June and July, to one on white clover; but we always notice those seen at work on red clover have the full number of stripes; the dark bees in hybrid stocks don't seem to fancy red clover. We had the best yield of basswood honey that we have ever known. There is but little basswood in this section, and so many bees having died off the past winter, I presume ours had the full benefit of all the basswood in the range of their flight. Not having weighed all my surplus, I can't report yet; but from my best stock (which was in a standard Langstroth hive, as usual), I took in to the extent of eighty-one pounds gross, about the 25th of July, and it is now at work on buckwheat, in a case of twenty-four two pound frames, which are built down to the bottom with comb; but most of my stocks had the swarming fever very bad, the last part of June; honey yielded very slowly, just enough to keep them breeding rapidly, but not enough for them to build much comb in boxes, and the weather was excessively hot. My apiary is located in a very warm place, and in some cases, I have taken out nearly one-half of the brood combs and given them empty frames, cutting out all queen cells; but they would swarm in a day or two, and if put back would come out again and go into some other hive or nuclei, and if prevented by blocks, would scatter perhaps into five or six other hives, leaving a lot of boxes on the old stand, partly filled. The side box hive is the best swarming hive, by all odds. It looks now as if I should not get a pound of surplus from them. I got none from clover, and if they do not pick up soon, I shall get none from buckwheat. Wishing all success to the Journal, I remain as ever,

Yours,

J. P. MOORE.

[For the American Bee Journal.]

### An Early Swarm.

This has been so far a poor season for bees. Little surplus honey will be stored. Swarming commenced late; hybrids give the best satisfaction as honey gatherers. A swarm that was kept in the cellar all winter and fed, filled the hive with bees and swarmed the second day after being taken out, about the middle of April. Of course in this latitude there was no forage at that time, but by giving ready made comb and some feed they sustained themselves. I relate this as an unusual occurrence, showing that early swarms can be produced this way.

#### A NEW WAY OF HIVING A SWARM.

A few weeks since a swarm of a friend lodged in the top of a large sized willow tree some 50 or more feet up, no ladder long enough could be had, and the nature of the tree would not admit climbing, so the bees must go. But no, they hung, and hung, and stood a heavy thunder storm which rained and blowed tremendously without dislodging them. A hunter coming along, shot the limb off clear striking the ground with great force, and never did bees go into a hive quicker.

J. L. FISHER.

*Tiffin, Ohio, July 15, 1872.*